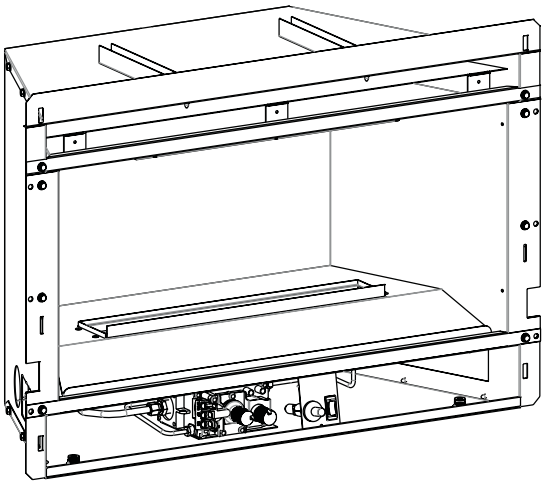
INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL

Loft Vent Free Fireplace Insert



Shown without required front.

GAS-FIRED
UL
LISTED

UNVENTED
GAS FIREPLACE
MODELS

VFL20IN3(0,1,2,3)10(N,P)-1
VFL20IN3(0,1,2,3)(N,P)-1
VFL20IN7(0,1,2,3)(N,P)-1

VFL28IN3(0,1,2,3)(N,P)-1
VFL28IN7(0,1,2,3)(N,P)-1

NATIONAL FIREPLACE INSTITUTE
NFI
CERTIFIED
www.nficertified.org

We suggest that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

Installer: Leave this manual with the appliance.
Consumer: Retain this manual for future reference.

WARNING: If the information in these instructions are not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- **Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.**
- **WHAT TO DO IF YOU SMELL GAS**
  - **Do not try to light any appliance.**
  - **Do not touch any electrical switch; do not use any phone in your building.**
  - **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
  - **If you cannot reach your gas supplier, call the fire department.**
- **Installation and service must be performed by a qualified installer, service agency or the gas supplier.**

This appliance may be installed in an aftermarket, permanently located, manufactured (mobile) home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to page 15.

WARNING: If not installed, operated and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or from fuel combustion which can cause death or serious illness.

WATER VAPOR: A BY-PRODUCT OF UNVENTED ROOM HEATERS
Water vapor is a by-product of gas combustion. An unvented room heater produces approximately one (1) ounce (30ml) of water for every 1,000 BTU's (.3KW's) of gas input per hour. Refer to page 15.

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Quick Start Guide - Intermittent Pilot Systems

To START the Fireplace:

If the pilot is NOT lit:

1. At the same time, press the “OFF” and high flame buttons and release once there is an audible “beep” sound.
2. The pilot will ignite on the sixth beep. You may hear a clicking sound around the same time as that beep, this is normal.
3. There will be a total of 14 beeps. The main burner will ignite approximately 15 seconds after the pilot.

If the pilot IS lit.

1. To ignite the burner, press the high flame button (there will be a beep) for approximately 5 seconds until there is a soft click, then release the button.

To ADJUST the Flame Height

1. Press and hold the upper right button for a higher flame.
2. Press and hold the lower right button for a lower flame. Note: If you hold the lower right button for too long, the flames on the main burner will go out, but the ignitor will stay lit.

To SHUT OFF the Fireplace

1. To completely shut off the burner and ignitor, press and hold the “OFF” button until the unit “beeps.” The flames will go on the burner out once any lingering gas is used up.
2. To shut off the burner but keep the ignitor on, push the low flame button (bottom right) for 10 seconds and then release.

FOR MORE INFORMATION, SEE OPERATION INSTRUCTIONS.

VFL(20,28)IN7 Remote Quick Start Instructions: Cut out this page and keep it near your remote.

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IMPORTANT SAFETY INFORMATION

⚠ **DANGER**: Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING**: Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION**: Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE: Addresses practices not related to personal injury.

- **An unvented room heater having an input rating of more than 6,000 Btu per hour shall not be installed in a bathroom**
- **An unvented room heater having an input rating of more than 10,000 Btu per hour shall not be installed in a bedroom or bathroom.**
- **Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.**
- **Children and adults should be alerted to the hazard of high surface temperature and should stay away to avoid burns or clothing ignition.**
- **Young children should be carefully supervised when they are in the same room with the appliance.**
- **Do not place clothing or other flammable material on or near the appliance.**
- **Installation and repair should be done by a QUALIFIED SERVICE PERSON. This appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.**
- **DO NOT use this room heater if any part has been under water. Immediately call a qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.**
- **You must operate heater with fireplace screen closed in place. Do not close glass doors while operating heater.**
- **Do not place trash, logs or other articles on the log set during operation.**
- **During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These bonding agents are not harmful but may produce annoying smoke and smells as they are burned off during initial operation of the appliance. This is a normal temporary occurrence. A window should be opened during the initial bake out period.**
- **Correct installation of the ceramic fiber logs, proper location of the heater and annual cleaning are necessary to avoid potential problems with sooting. Sooting, resulting from improper installation or operation, can settle on surfaces outside the fireplace. See instructions for proper installation.**
- ⚠ **WARNING: Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.**
- ⚠ **WARNING: Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this heater.**
- ⚠ **WARNING! This fireplace needs fresh air for ventilation to run properly. This fireplace has an ODS (oxygen depletion sensor) which will shut down the heater if adequate fresh air is not available. See troubleshooting section in the instructions.**
- **Keep appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.**
- ⚠ **WARNING: Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.**

⚠ WARNING

When used without adequate combustion and ventilation air, heater may give off CARBON MONOXIDE, an odorless, poisonous gas.

Do not install heater until all necessary provisions are made for combustion and ventilation air. Consult the written instructions provided with the heater for information concerning combustion and ventilation air. In the absence of instructions, refer to the National Fuel Gas Code, ANSI Z223.1/NFPA 54, Air for Combustion and Ventilation, or applicable local codes.

This heater is equipped with a PILOT LIGHT SAFETY SYSTEM designed to turn off the heater if not enough fresh air is available.

DO NOT TAMPER WITH PILOT LIGHT SAFETY SYSTEM!

If heater shuts off, do not relight until you provide fresh air.

If heater keeps shutting off, have it serviced. Keep burner and control compartment clean.

CARBON MONOXIDE POISONING MAY LEAD TO DEATH.

Early signs of carbon monoxide poisoning resemble the flu, with headache, dizziness and/or nausea. If you have these signs, heater may not be working properly. Get fresh air at once! Have heater serviced.

Some people — pregnant women, persons with heart or lung disease, anemia, those under the influence of alcohol, those at high altitudes — are more affected by carbon monoxide than others.

The pilot light safety system senses the depletion of oxygen at its location. If this heater is installed in a structure having a high vertical dimension, the possibility exists that the oxygen supply at the higher levels will be less than that at the heater. In this type of application, a fan to circulate the structure air will minimize this effect. The use of this fan will also improve the comfort level in the structure. When a fan is used to circulate air, it should be located so that the air flow is not directed at the burner.

SAFETY INFORMATION FOR USERS OF LP-GAS

Propane (LP-Gas) is a flammable gas which can cause fires and explosions. In its natural state, propane is odorless and colorless. You may not know all the following safety precautions which can protect both you and your family from an accident. Read them carefully now, then review them point by point with the members of your household. Someday when there may not be a minute to lose, everyone's safety will depend on knowing exactly what to do. If, after reading the following information, you feel you still need more information, please contact your gas supplier.

LP-GAS WARNING ODOR

If a gas leak happens, you should be able to smell the gas because of the odorant put in the LP-Gas. That's your signal to go into immediate action!

- Do not operate electric switches, light matches, use your phone. Do not do anything that could ignite the gas.
- Get everyone out of the building, vehicle, trailer, or area. Do that IMMEDIATELY.
- Close all gas tank or cylinder supply valves.
- LP-Gas is heavier than air and may settle in low areas such as basements. When you have reason to suspect a gas leak, keep out of basements and other low areas. Stay out until firefighters declare them to be safe.
- Use your neighbor's phone and call a trained LP-Gas service person and the fire department. Even though you may not continue to smell gas, do not turn on the gas again. Do not re-enter the building, vehicle, trailer, or area.
- Finally, let the service man and firefighters check for escaped gas. Have them air out the area before you return. Properly trained LP-Gas service people should repair the leak, then check and relight the gas appliance for you.

NO ODOR DETECTED - ODOR FADE

Some people cannot smell well. Some people cannot smell the odor of the chemical put into the gas. You must find out if you can smell the odorant in propane. Smoking can decrease your ability to smell. Being around an odor for a time can affect your sensitivity or ability to detect that odor. Sometimes other odors in the area mask the gas odor. People may not smell the gas odor or their minds are on something else. Thinking about smelling a gas odor can make it easier to smell.

The odorant in LP-gas is colorless, and it can fade under some circumstances. For example, if there is an underground leak, the movement of the gas through soil can filter the odorant. Odorants in LP-Gas also are subject to oxidation. This fading can occur if there is rust inside the storage tank or in iron gas pipes.

The odorant in escaped gas can adsorb or absorb onto or into walls, masonry and other materials and fabrics in a room. That will take some of the odorant out of the gas, reducing its odor intensity.

LP-Gas may stratify in a closed area, and the odor intensity could vary at different levels. Since it is heavier than air, there may be more odor at lower levels. Always be sensitive to the slightest gas odor. If you detect any odor, treat it as a serious leak. Immediately go into action as instructed earlier.

SOME POINTS TO REMEMBER

- **Learn to recognize the odor of LP-gas.** Your local LP-Gas Dealer can give you a "Scratch and Sniff" pamphlet. Use it to find out what the propane odor smells like. If you suspect that your LP-Gas has a weak or abnormal odor, call your LP-Gas Dealer.
- If you are not qualified, do not light pilot lights, perform service, or make adjustments to appliances on the LP-Gas system. If you are qualified, consciously think about the odor of LP-Gas prior to and while lighting pilot lights or performing service or making adjustments.
- Sometimes a basement or a closed-up house has a musty smell that can cover up the LP-Gas odor. Do not try to light pilot lights, perform service, or make adjustments in an area where the conditions are such that you may not detect the odor if there has been a leak of LP-Gas.
- Odor fade, due to oxidation by rust or adsorption on walls of new cylinders and tanks, is possible. Therefore, people should be particularly alert and careful when new tanks or cylinders are placed in service. Odor fade can occur in new tanks, or reinstalled old tanks, if they are filled and allowed to set too long before refilling. Cylinders and tanks which have been out of service for a time may develop internal rust which will cause odor fade. If such conditions are suspected to exist, a periodic sniff test of the gas is advisable. **If you have any question about the gas odor, call your LP-gas dealer. A periodic sniff test of the LP-gas is a good safety measure under any condition.**
- If, at any time, you do not smell the LP-Gas odorant and you think you should, assume you have a leak. Then take the same immediate action recommended above for the occasion when you do detect the odorized LP-Gas.
- If you experience a complete "gas out," (the container is under no vapor pressure), turn the tank valve off immediately. If the container valve is left on, the container may draw in some air through openings such as pilot light orifices. If this occurs, some new internal rusting could occur. If the valve is left open, then treat the container as a new tank. Always be sure your container is under vapor pressure by turning it off at the container before it goes completely empty or having it refilled before it is completely empty.

IMPORTANT INSTALLATION GUIDELINES

Proper Primary Airflow into Burner

For proper burner operation and flame appearance, the flow of primary air into the venturi tube, located on the rear of the burner, must not be reduced. This flow of air is reduced if dirt, lint or other obstructions build-up around or inside the venturi. Any obstruction in the venturi tube area must be removed. The flow of air into the venturi is also reduced if the gas orifice isn't centered in the venturi inlet and/or is not aligned with the venturi. Any misalignment of the burner orifice may be corrected by bending the shutter cap holding the orifice to the inlet of the venturi tube.

Ceiling Fans, Portable Fans or Logs Installed Near Cold Air Returns

Ceiling fans or oscillating floor type fans need to be monitored during the operation of vent-free logs. If the air blows directly into the flame causing it to disrupt the flame, disrupt the flame, it should be turned off or redirected. Ceiling fans could be reversed to possibly eliminate flame impingement, and the floor fan could be redirected. Upon installation, be aware of any cold air returns or vents in the proximity of the log set. Any draft created around a vent-free log set can cause the flame to impinge on the log and create a sooting situation.

⚠ WARNING

Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.

⚠ WARNING

Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this heater.

Candles

Avoid the use of scented or decorative candles while the log set is in operation. Candles produce a residue in the air that creates a soot like substance. Burning candles while the log set is operating magnifies the problem. It should be noted that candles, in general, produce soot. The amount of time burned and the quantity of candles burned will determine the amount of soot produced and deposited.

INTRODUCTION

Instructions to Installer

1. Installer must leave instruction manual with owner after installation.
2. Installer must have owner fill out and mail warranty card supplied with unvented room heater.
3. Installer should show owner how to start and operate unvented room heater.

Always consult your local Building Department regarding regulations, codes or ordinances which apply to the installation of an unvented room heater.

This appliance may be installed in an aftermarket* manufactured (mobile) home, where not prohibited by state or local codes.

*Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

⚠ WARNING

ANY CHANGE TO THIS HEATER OR ITS CONTROLS CAN BE DANGEROUS.
Improper installation or use of the heater can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.

This series is design certified in accordance with American National Standard Z21.11.2 by the Canadian Standards Association Laboratories as an Unvented Room Heater and should be installed according to these instructions.

Any alteration of the original design, installed other than as shown in these instructions or use with a type of gas not shown on the rating plate is the responsibility of the person and company making the change.

Millivolt 3 Series Only
750 Millivolt System
When you ignite the pilot, the thermocouple produces millivolts (electrical current) which energizes the magnet in the gas valve. After 30 seconds to 1 minute time period you can release the gas control knob and the pilot will stay ON. Allow your pilot flame to operate an additional one (1) to two (2) minutes before you turn the gas control knob from the PILOT position to the ON position. This time period allows the millivolts (electrical energy) to build-up to a sufficient level allowing the gas control to operate properly.

Important
All correspondence should refer to complete Model Number, Serial Number and type of gas.

Notice: During initial firing of this unit, its paint will bake out, and smoke will occur. To prevent triggering of smoke alarms, ventilate the room in which the unit is installed.

Installation on Rugs and Tile
If this appliance is installed directly on carpeting, tile or other combustible material other than wood flooring the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.

The base referred to above does not mean the fire-proof base as used on wood stoves. The protection is for rugs that are extremely thick and light colored tile.

Solid-fuels shall not be burned in a masonry or *UL 127* factory-built fireplace in which an unvented room heater is installed.

Qualified Installing Agency
Installation and replacement of gas piping, gas utilization equipment or accessories and repair and servicing of equipment shall be performed only by a qualified agency. The term "qualified agency" means any individual, firm, corporation or company which either in person or through a representative is engaged in and is responsible for (a) the installation or replacement of gas piping or (b) the connection, installation, repair or servicing of equipment, who is experienced in such work, familiar with all precautions required and has complied with all the requirements of the authority having jurisdiction.

State of Massachusetts: The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts.

Sellers of unvented propane or natural gas-fired supplemental room heaters shall provide to each purchaser a copy of 527 CMR 30 upon sale of the unit.

In the Sate of Massachusetts, unvented propane and natural gas-fired space heaters shall be prohibited in bedrooms and bathrooms.

The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1.*
**Available from the American National Standards Institute, Inc. 1430 Broadway, New York, N.Y. 10018.*

High Altitudes
For altitudes/elevations above 2,000 feet (610m), ratings should be reduced at the rate of 4 percent for each 1,000 feet (305m) above sea level. Contact the manufacturer or your gas company before changing spud/orifice size.

Well Head Gas Installations
Some natural gas utilities use "well head" gas. This may affect the Btu output of the unit. Contact the gas company for the heating value. Contact the manufacturer or your gas company before changing spud/orifice size.

⚠ WARNING

This appliance is equipped for (natural gas or propane) gas. Field conversion is not permitted.

SPECIFICATIONS

VFL20IN3*	LP	NAT
Input Btu/hr Maximum	20,000	20,000
Btu/hr Minimum	16,000	13,000
Orifice	#55	#48
Air Shutter Opening	3/16"	Fully Closed
VFL20IN7*	**LP**	**NAT**
Input Btu/hr Maximum	20,000	20,000
Btu/hr Minimum	14,000	13,000
Orifice	#55	#48
Air Shutter Opening	3/16"	Fully Closed
VFL20IN3*10	**LP**	**NAT**
Input Btu/hr Maximum	10,000	10,000
Btu/hr Minimum	10,000	10,000
Orifice	#64	#53
Air Shutter Opening	Fully Closed	Fully Closed
VFL28IN3*	**LP**	**NAT**
Input Btu/hr Maximum	28,000	28,000
Btu/hr Minimum	23,000	19,000
Orifice	1.55	#40
Air Shutter Opening	3/16"	Fully Closed
VFL28IN7*	**LP**	**NAT**
Input Btu/hr Maximum	28,000	28,000
Btu/hr Minimum	23,000	19,000
Orifice	1.55	#40
Air Shutter Opening	3/16"	Fully Closed

Accessories for VFL(20,28)IN3 (Millivolt) Models	
Remote Control Accessories	**Description**
FRBC	Battery Operated Remote Control
FRBTC	Battery Operated Remote Control with Thermostat
FRBTP	Battery Operated Programmable Remote Control
FREC	Electric Remote Control
FWS-1	Wall Switch
TRW	Remote Wall Thermostat (Wireless)
TMV	Wall Thermostat, Millivolt - Reed Switch

VFL20IN units require the use of one of the following surrounds:

Surround Kit	Description
DF20GBL	Decorative Front, Tempered Glass, Black
DF20MBL	Decorative Front, Metal Frame, Black
DF20LBL	Decorative Front, Louver, Glass Frame (Includes 6 x 6 Surround)

VFL28IN units require the use of one of the following surrounds

Surround Kit	Description
DF28GBL	Decorative Front, Tempered Glass, Black
DF28MBL	Decorative Front, Metal Frame, Black
DF28LBL	Decorative Front, Louver, Glass Frame (Includes 6 x 6 Surround)

VFL20IN Optional Accessories	
Part Number	**Description**
FBB7	Variable Speed Blower
DG18BKP	Decorative Glass Black Polished
DG18BUC	Decorative Glass Blue Clear
DG18CLF	Decorative Glass Frost

VFL28IN Optional Accessories	
Part Number	**Description**
FBB7	Variable Speed Blower
DG24BKP	Decorative Glass Black Polished
DG24BUC	Decorative Glass Blue Clear
DG24CLF	Decorative Glass Frost

VFL(20,28)IN7 Accessory	
SH1BL	AC Power Adaptor for IP Units

INSTALLATION IN A FIREPLACE

1. Before beginning, check to make sure there is no hidden damage to the unit. Take a minute and plan out the gas and electrical route. It is best to start with the gas line first, followed by the electrical supply requirements.
2. Minimum fireplace opening requirements are shown in **Figure 2** of this installation manual. The firebrick (refractory), glass doors, screen rails, screen mesh and log grates can be removed from a factory built fireplace in order to gain minimum gas insert opening requirements prior to installing the gas fireplace insert.
   Caution: Determine the total thickness of finishing materials (i.e. stone, brick or marble) so that the proper dimensions can be maintained for installing the fireplace and decorative fronts.
3. This insert requires no hearth extensions. Combustible material on the floor may be installed up to the insert. Do not obstruct the lower louver of the insert. The original fireplace cannot be returned to solid fuel in this condition.
4. The side walls, top and floor structures of the firebox may not be altered with the exception of removable baffles and dampers. Smoke shields, shelves and baffles may be removed if attached with mechanical fasteners. The original fireplace cannot be returned to solid fuel in this condition.
5. The insert surround is tested and approved with this gas insert and may cover existing air circulation vents or grills on the solid fuel fireplace it is installed into. If the surround does not cover the entire ventilation grill surface, the exposed grill area should be left open.

***Notice*: Cutting of sheet metal parts of a fireplace in order to install the fireplace insert is prohibited.**

***Notice*: The following statement is also provided on a separate label plate in the instruction packet. Prior to installation of the fireplace insert, the installer must mechanically secure this warning plate to the inside of the fireplace for future reference as required.**

⚠ WARNING

The solid fuel fireplace has been converted for use with gas only and cannot be used for burning wood or solid fuels unless all original parts have been replaced and the fireplace has been reapproved by the authority having jurisdiction.

See "Positioning, Leveling and Securing Insert" below.

6. Install the insert without the surround panels attached and make all gas venting and electrical connections.

If the factory built fireplace does not have gas access holes provided, an access hole of 1 1/2" diameter (37.5mm) or less may be drilled through the lower sides or bottom of the firebox in a proper workmanship like manner. This access hole must be plugged with a non-combustible insulation after the gas supply line has been installed.

7. The surround panel assembly is installed after the fireplace has been installed with all the gas and electrical connections completed. Refer to instructions included with the surround panel kit.

Ensure there are no obstructions to side air passages of decorative trim once installed on insert.

Positioning, Leveling and Securing Insert

1. Place the insert into position

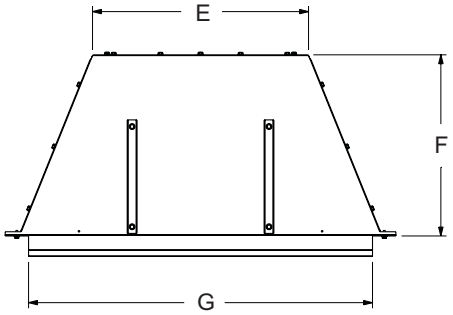
Notice: The front flanges of the insert (without surround panels) should be set at approximately 1" in front of the face of the fireplace.

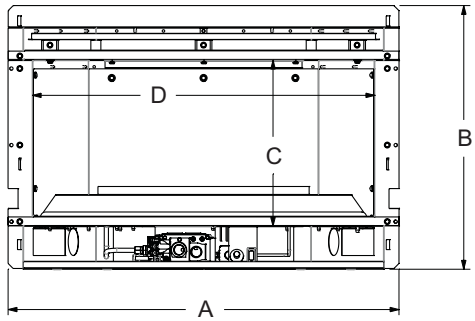
2. Level the insert from side to side and front to back.
3. If necessary, use the leveling bolts included in the instruction pack. Screw the legs into the nuts installed in the bottom of the insert. Turn legs in until insert is level.
   ***Notice*:** The best way to access the leveling bolt locations is to remove the burner and firebox bottom.

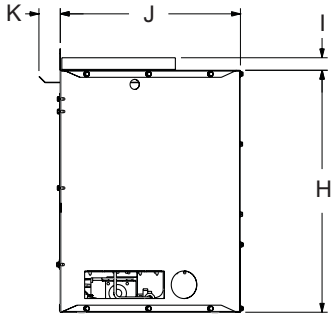
FIREPLACE INSERT DIMENSIONS

When planning a fireplace insert installation, it's necessary to determine:

- Gas supply piping.
- Electrical connections - for optional blower
- Whether optional accessories - devices such as a wall switch or remote control - are desired.
- Electrical supply requirements for optional blower. (120V, 60Hz, 1 Amp)
- Proper opening size of fireplace required for installation of the fireplace insert.







VF FIREPLACE INSERT DIMENSIONS											
MODEL	A	B	C	D	E	F	G	H	I	J	K
VFL20IN	29 1/4"	19 3/4"	12 7/16"	25 5/8"	16 3/16"	13 9/16"	25 3/4"	18 1/8"	15/16"	13 1/2"	1 5/8"
VFL28IN	32 1/4"	22 3/4"	15 7/16"	28 1/2"	17 13/16"	15"	29 1/2"	21 1/8"	15/16"	15"	1 5/8"

Figure 1

Fireplace Opening Dimensional Information/Sizing				
MINIMUM FIREPLACE OPENING DIMENSIONS				
MODEL	HEIGHT A	FRONT WIDTH B	DEPTH C	REAR WIDTH D
VFL20IN	19 1/4"	26 3/4" *	12 3/4"	15 3/4"
VFL28IN	22 1/4"	30 3/4" *	14 1/4"	19"

Notice: These are the minimum dimensions of a fireplace that the fireplace insert will fit into. It allows room for the box and the fireplace surround to fit onto the front of the unit. It is not intended to be used for framing dimensions. Refer to Figures 3 to 5 for framing dimensions.

*Notice: Front Width B is the minimum and maximum dimension.

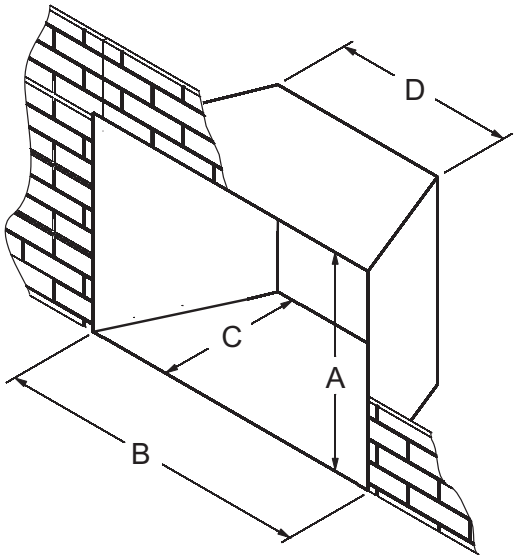


Figure 2

BUILT-IN FIREPLACE INSTALLATION

In planning the installation for the fireplace, it is necessary to determine where the unit is to be installed and whether optional accessories are desired. Gas supply piping should also be planned at this time.

The fireplace can be mounted on any of these surfaces:

1. A flat hard combustible or non-combustible surface.
2. A raised platform of combustible or non-combustible material.
3. Four (4) corners of the fireplace so contact is made on all four perimeter edges on the bottom of the unit.
   (Example: Four (4) concrete masonry blocks.)

If the fireplace is installed directly on carpeting, tile or other combustible material other than wood flooring, it should be installed on a metal or wood panel extending the full width and depth of the unit.

At this point, you should have decided what components to include in your installation, and where the fireplace is to be located. If this has not been done, stop and consult your dealer for assistance with this planning.

This unit is designed to be installed in a zero-clearance enclosure. This means the combustible material can come in contact with the firebox.

Built-In Fireplace Installation

Built-in installation of this fireplace involves installing the fireplace into a framed-in enclosure. This makes the front of the fireplace flush with a wall.

Frame in rough opening. Use dimensions show in Figure 3 for a conventional rough opening. Use dimensions shown in Figure 4 for corner rough opening. Use Figure 5 for an elevated installation. Be sure to provided support to the bottom of the fireplace. Be sure to provide gas line for fireplace and electrical power for optional blower assembly.

1. Gas line connections must be made at this time. When facing the appliance, the gas supply will enter on the right-hand side. See "Gas Supply" page 17 to 18.
2. Insert fireplace into enclosure. Attach to wall with screws through holes on cabinet sides.
3. Level firebox. See "Positioning, Leveling and Securing Insert" on Page 10.
4. Finished wall surface will be flush to the leading edge of fireplace top and sides.
5. If used, the surround panel assembly is installed after the fireplace has been installed with all the gas and electrical connection completed. Refer to instructions included with the surround panel kit.
6. Installation of built-in fireplace is completed.

Rough Opening for Installing in Wall

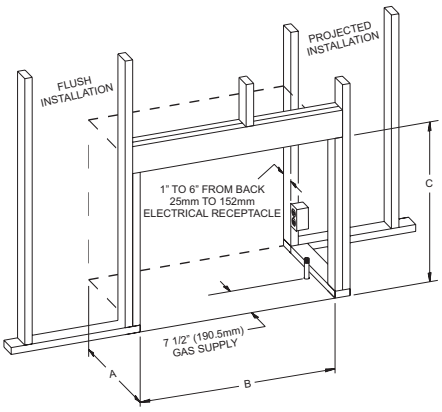


Figure 3

Rough Opening for Installing in Corner

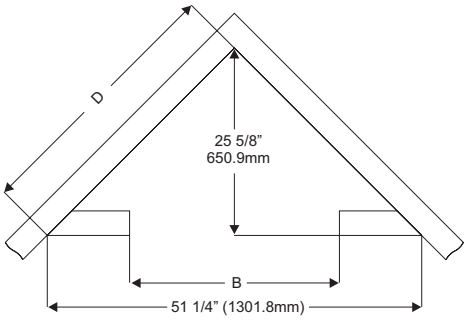


Figure 4

Rough Opening for Elevated Installation

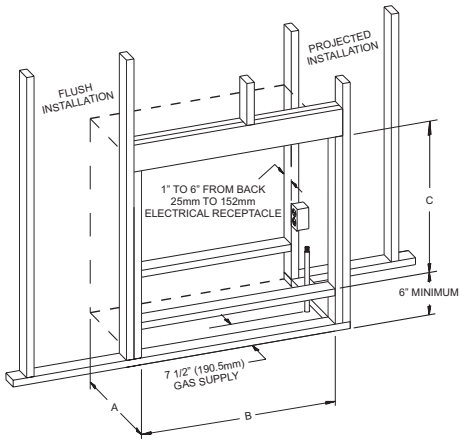
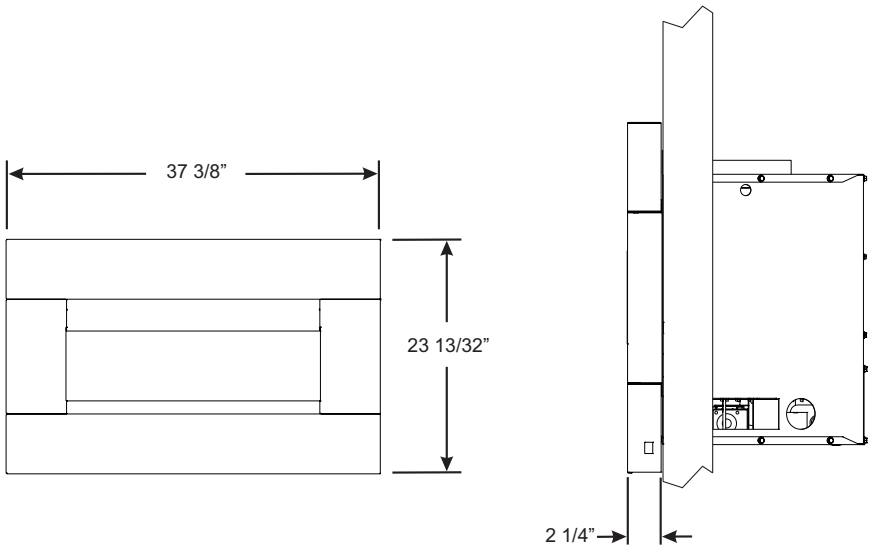


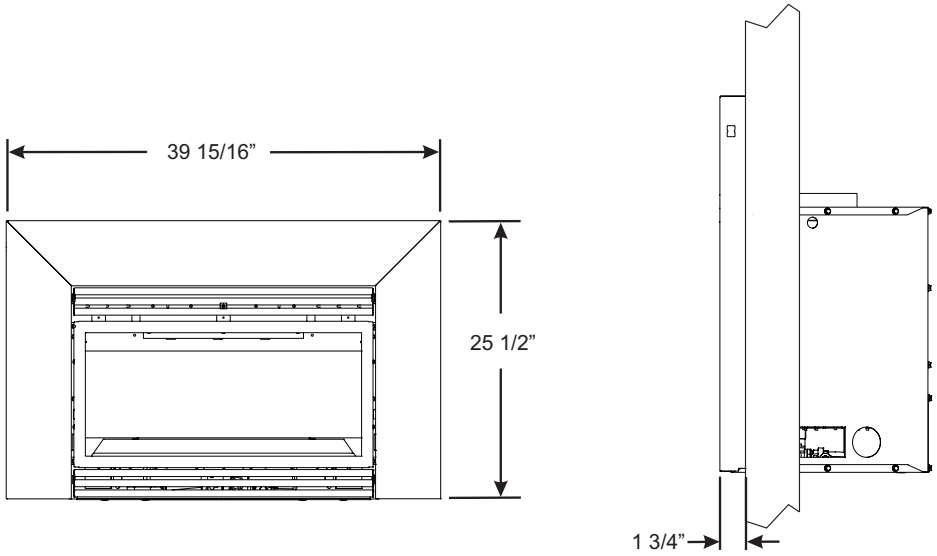
Figure 5

	A	B	C	D
VFL20IN	13 3/4" (349.3 mm)	27 3/4" (704.9 mm)	19 1/4" (489 mm)	36 1/4" (920.8 mm)
VFL28IN	16 3/4" (425.5 mm)	30 1/2" (774.7 mm)	22 1/2" (571.5 mm)	36 1/4" (920.8 mm)

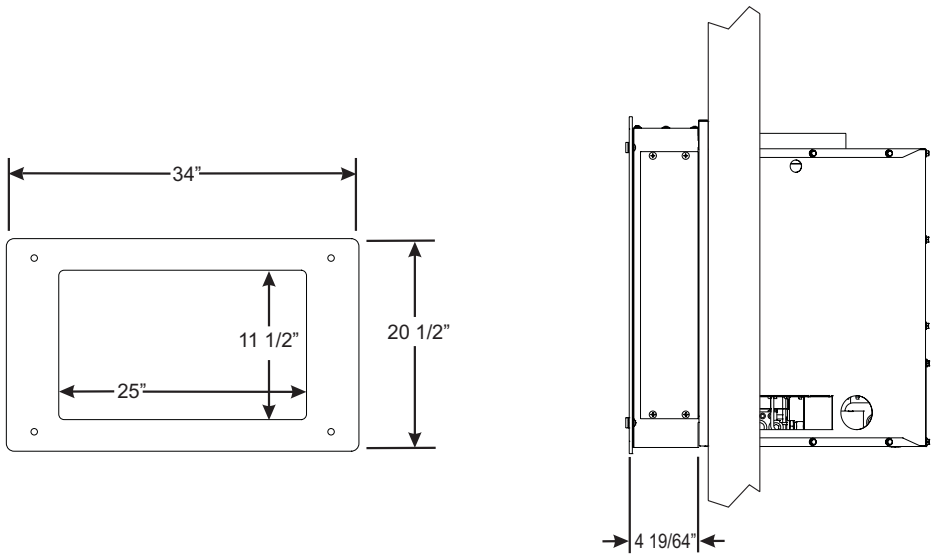
VFL20IN FIREPLACE WITH SURROUND DIMENSIONS



DF20MBL

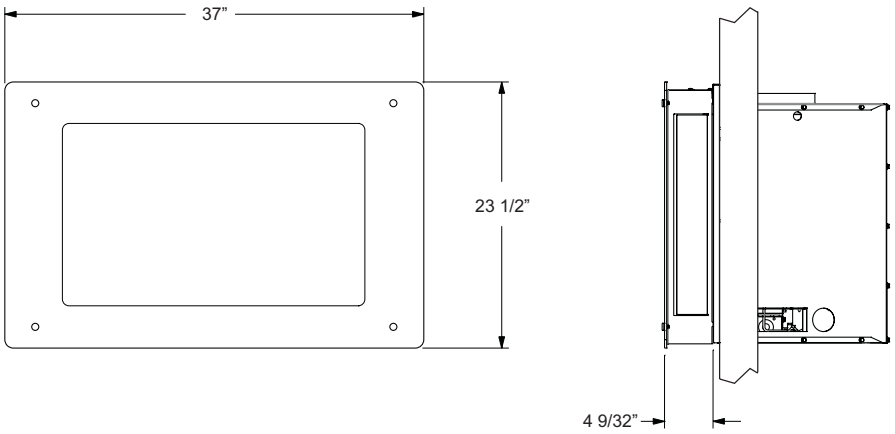


DF20LBL

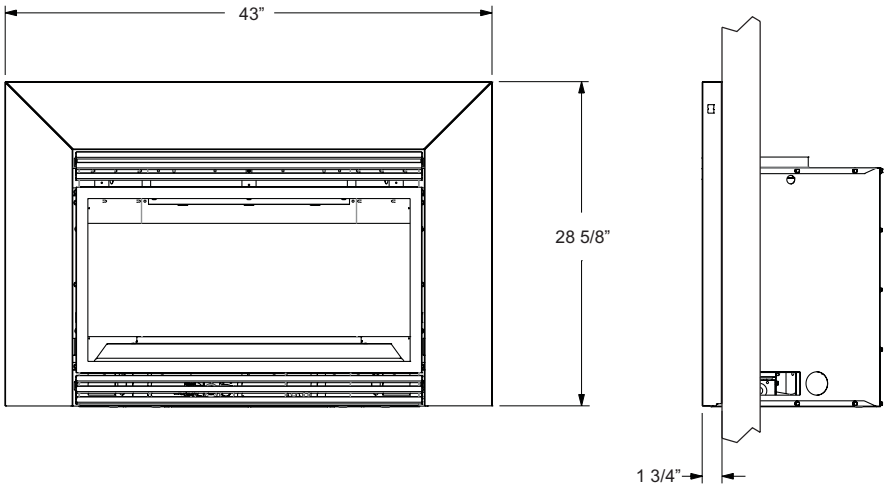


DF20GBL

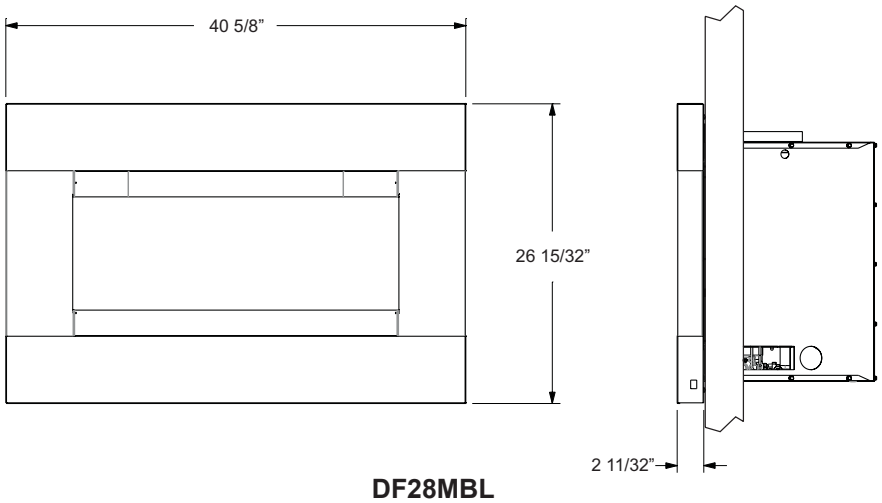
VFL28IN FIREPLACE WITH SURROUND DIMENSIONS



DF28GBL



DF28LBL



DF28MBL

WATER VAPOR: A BY-PRODUCT OF UNVENTED ROOM HEATERS

Water vapor is a by-product of gas combustion. An unvented room heater produces approximately one (1) ounce (30ml) of water for every 1,000 BTU's (.3KW's) of gas input per hour.

Unvented room heaters are recommended as supplemental heat (a room) rather than a primary heat source (an entire house). In most supplemental heat applications, the water vapor does not create a problem. In most applications, the water vapor enhances the low humidity atmosphere experienced during cold weather.

The following steps will help insure that water vapor does not become a problem.

1. Be sure the heater is sized properly for the application, including ample combustion air and circulation air.
2. If high humidity is experienced, a dehumidifier may be used to help lower the water vapor content of the air.
3. Do not use an unvented room heater as the primary heat source.

PROVISIONS FOR ADEQUATE COMBUSTION & VENTILATION AIR

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

Installation in a Confined Space

A confined space is an area with volume less than 50 cubic feet per 1,000 Btuh of the combined input rates of all appliances drawing combustion air from that space. Small areas such as equipment rooms are confined spaces. Furnaces installed in a confined space which supply heated air to areas outside the space must draw return air from outside the space through tightly sealed return air ducts. A confined space must have 2 openings into the space for combustion air. One opening must be within 12 inches of the ceiling and the other must be within 12 inches of the floor. The required sizing of these openings is determined by whether inside or outside air is used to support combustion, the method by which the air is brought to the space (vertical or horizontal duct) and by the total input rate of all appliances in the space.

Unusually Tight Construction

The air that leaks around doors and windows may provide enough fresh air for combustion and ventilation. However, in buildings of unusually tight construction, you must provide additional fresh air.

Unusually tight construction is defined as construction where:

a. Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm or less with openings gasketed or sealed, and
b. Weather-stripping has been added on openable windows and doors, and
c. Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

If your home meets all of the three criteria above, you must provide additional fresh air. See **"Ventilation Air From Outdoors,"** page 16.

Determining if You Have a Confined or Unconfined Space

Use this worksheet to determine if you have a confined or unconfined space.

Space: Includes the room in which you will install heater plus any adjoining rooms with doorless passageways or ventilation grills between the rooms.

1. Determine the volume of the space (length x width x height).
   Length x Width x Height = _____ cu. ft. (volume of space)
   Example: Space size 16 ft. (length) x 10 ft. (width) x 8 ft. (ceiling height) = 1,280 cu. ft. (volume of space)
   If additional ventilation to adjoining room is supplied with grills or openings, add the volume of these rooms to the total volume of the space.
2. Divide the space volume by 50 cubic feet to determine the maximum BTU/Hr the space can support.
   _____ (volume of space) ÷ 50 cu. ft. = (maximum BTU/Hr the space can support)
   Example: 1,280 cu. ft. (volume of space) ÷ 50 cu. ft. = 25.6 or 25,600 (maximum BTU/Hr the space can support)
3. Add the BTU/Hr of all fuel burning appliances in the space.

Vent-free heater		_____ BTU/Hr
Gas water heater		_____ BTU/Hr
Gas furnace		_____ BTU/Hr
Vented gas heater		_____ BTU/Hr
Gas fireplace logs		_____ BTU/Hr
Other gas appliances*	+	_____ BTU/Hr
Total	=	_____ BTU/Hr

Example: Vented gas heater		20,000	BTU/Hr
Vent-free heater		+ 18,000	BTU/Hr
Total	=	38,000	BTU/Hr

*Do not include direct-vent gas appliances. Direct vent draws combustion air from the outdoors and vents to the outdoors.

4. Compare the maximum BTU/Hr the space can support with the actual amount of BTU/Hr used.
   _____ BTU/Hr (maximum the space can support)
   _____ BTU/Hr (actual amount of BTU/Hr used)

   Example:
   25,600 BTU/Hr (maximum the space can support)
   38,000 BTU/Hr (actual amount of BTU/Hr used)

⚠ WARNING

If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the *National Fuel Gas Code, ANSI Z223.1/NFPA 54, Air for Combustion and Ventilation,* or applicable local codes.

The space in the above example is a confined space because the actual BTU/Hr used is more than the maximum BTU/HR the space can support. You must provide additional fresh air. Your options are as follows:

A. Rework worksheet, adding the space of an adjoining room. If the extra space provides an unconfined space, remove door to adjoining room or add ventilation grills between rooms. See **Ventilation Air From Inside Building.**
B. Vent room directly to the outdoors. See **Ventilation Air From Outdoors.**
C. Install a lower BTU/Hr heater, if lower BTU/Hr size makes room unconfined.

If the actual BTU/Hr used is less than the maximum BTU/Hr the space can support, the space is an unconfined space. You will need no additional fresh air ventilation.

⚠ WARNING

You must provide additional ventilation air in a confined space.

Ventilation Air

Ventilation Air From Inside Building (Figure 6)

This fresh air would come from an adjoining unconfined space. When ventilating to an adjoining unconfined space, you must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor on the wall connecting the two spaces (see options 1 and 2, Figure 6). You can also remove door into adjoining room (see option 3, Figure 6). Each ventilation grill or opening shall have a minimum free area of one square inch per 1,000 BTUH of the total input rating of the gas equipment in the confined space.

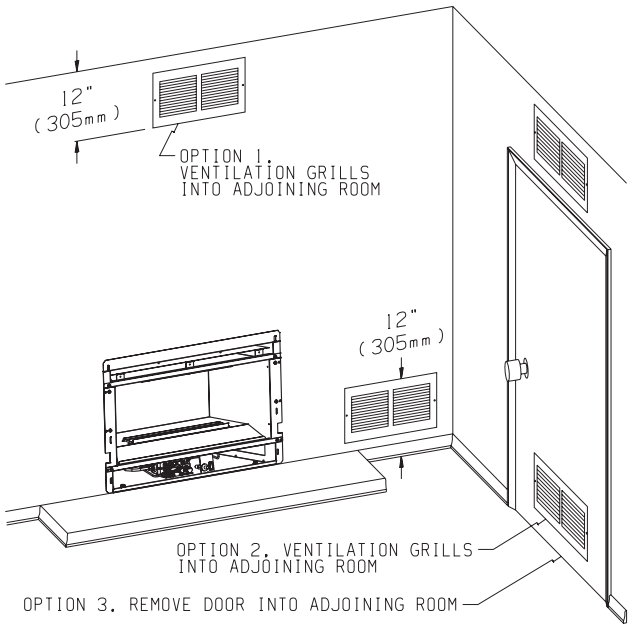


Figure 6

⚠ WARNING

Rework worksheet, adding the space of the adjoining unconfined space. The combined spaces must have enough fresh air to supply all appliances in both spaces.

Ventilation Air From Outdoors (Figure 7)

Provide extra fresh air by using ventilation grills or ducts. You must provide two permanent openings: one within 12" of the ceiling and one with 12" of the floor. Connect these items directly to the outdoors or spaces open to the outdoors. These spaces include attics and crawl spaces. In most cases for direct communication with the outdoors or direct communication through a vertical duct a free area opening of one square inch per 4,000 BTU/Hr of heater input rating for each grill. If a horizontal duct is used, a grill free area or duct opening shall have a free area opening of one square inch per 2,000 BTU/Hr for each grill. Follow the *National Fuel Code ANSI Z223.1/NFPA54, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

IMPORTANT: Do not provide openings for inlet or outlet air into attic if attic has a thermostat-controlled power vent. Heated air entering the attic will activate the power vent.

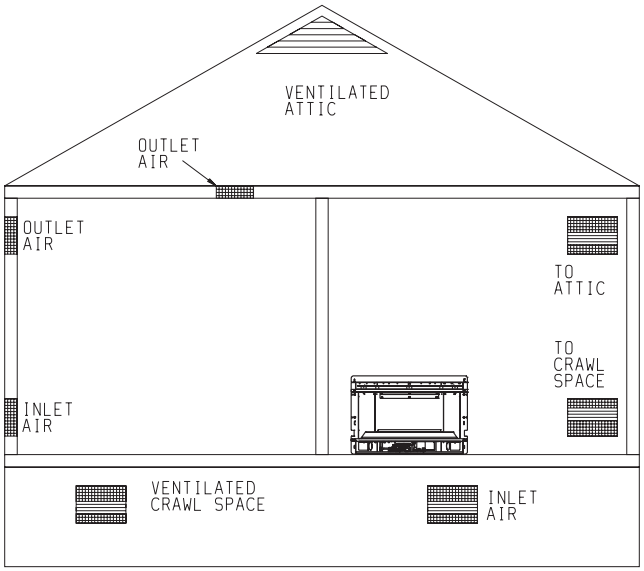
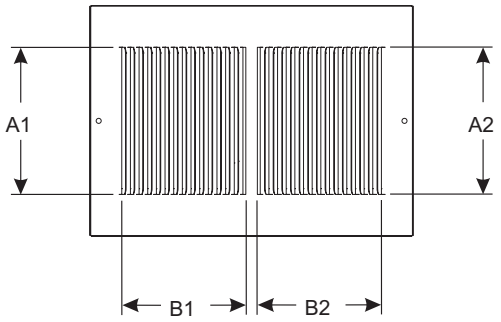


Figure 7



A1 x B1 = C1
A2 x B2 = C2
C1 + C2 = Sq. In. Required

Example: For a 30,000 BTU Heater, 1 sq in per 1,000 BTU equals 30 sq. in. of opening.

(A1) 5in² x (B1) 3in² = (C1) 15in²
(A2) 5in² x (B2) 3in² = (C2) 15in²
(C1) 15in² + (C2) 15in² = 30in²

Figure 8

GAS SUPPLY

The gas pipeline can be brought in through the right or left side of the appliance. The insert has a Flexline with shutoff valve located on the right side when facing the unit. **See Figures 9 and 10.** Consult the current National Fuel Gas Code, ANSI Z223.1 CAN/CGA-B149 (.1 or .2) installation code.

Recommended Gas Pipe Diameter				
Pipe Length	**Schedule 40 Pipe Inside Diameter**		**Tubing, Type L Outside Diameter**	
	Nat.	L.P.	Nat.	L.P.
0-10ft 0-3m	1/2" 12.7mm	3/8" 9.5mm	1/2" 12.7mm	3/8" 9.5mm
11-40ft 4-12m	1/2" 12.7mm	1/2" 12.7mm	5/8" 15.9mm	1/2" 12.7mm
41-100ft 13-30m	1/2" 12.7mm	1/2" 12.7mm	3/4" 19mm	1/2" 12.7mm
101-150ft 31-46m	3/4" 19mm	1/2" 12.7mm	7/8" 22.2mm	3/4" 1.9 mm

***Caution*:** Never use plastic pipe. Check to confirm whether your local codes allow copper tubing or galvanized.
***Notice*:** Since some municipalities have additional local codes, it is always best to consult your local authority and installation code.

The use of the following gas connectors is recommended:

— ANS Z21.24 Appliance Connectors of Corrugated Metal Tubing and Fittings.

— ANS Z21.45 Assembled Flexible Appliance Connectors of Other Than All-Metal Construction

The above connectors may be used if acceptable by the authority having jurisdiction. The state of Massachusetts requires that a flexible appliance connector cannot exceed three feet in length.

Installing the Main Gas Cock

Each appliance should have its own manual gas cock.
A manual main gas cock should be located in the vicinity of the unit. Where none exists, or where its size or location is not adequate, contact your local authorized installer for installation or relocation. Compounds used on threaded joints of gas piping shall be resistant to the action of liquefied petroleum gases. The gas lines must be checked for leaks by the installer. This should be done with a soap solution watching for bubbles on all exposed connections, and if unexposed, a pressure test should be made.

Never use an exposed flame to check for leaks. Appliance must be disconnected from piping at inlet of control valve and pipe capped or plugged for pressure test. Never pressure test with appliance connected; control valve will sustain damage!

***Notice*:** The millivolt gas controls are equipped with a captured screw type pressure test point, therefore it is not necessary to provide a 1/8" test point up stream of the control.

When using copper or flex connector use only approved fittings.
The appliance and it's individual shut off valve must be disconnected from supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5kPa).
The appliance must be isolated from the gas supply piping system by closing its individual manual shut off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5kPa).
Attention! If one of the procedures results in pressures in excess of 1/2 psig (14" w.c.) (3.5 kPa) on the fireplace gas valve, it will result in a hazardous condition.

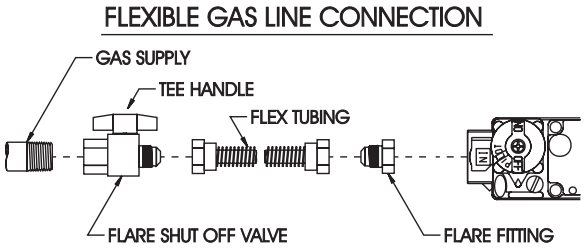


Figure 9

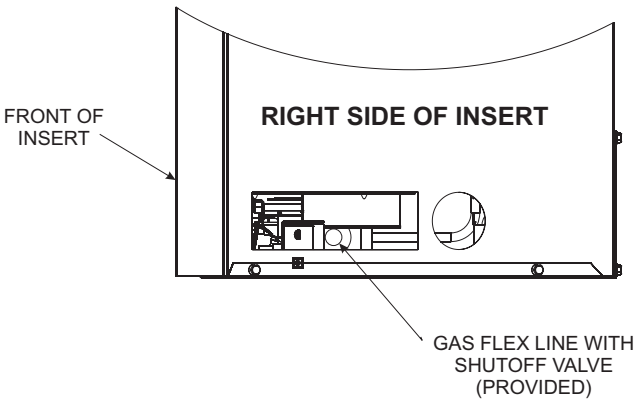


Figure 10

GAS SUPPLY (continued)

Checking Manifold Pressure
MILLIVOLT VALVES

Natural gas will have a manifold pressure of approximately 3.5" w.c. for maximum input or 1.7" w.c. for minimum input at the pressure regulator outlet with the inlet pressure to the pressure regulator from a minimum of 4.5" w.c. for the purpose of input adjustment to a maximum of 10.5" w.c.

Propane gas will have a manifold pressure approximately 10.0"w.c. (2.49kPa) for maximum input or 4.9"w.c. for minimum input at the pressure regulator outlet with the inlet pressure to the pressure regulator from a minimum of 11.0"w.c. for the purpose of input adjustment to a maximum of 13.0"w.c.

INTERMITTENT PILOT VALVES

Natural gas will have a manifold pressure of approximately 3.5" w.c. at the pressure regulator outlet with the inlet pressure to the pressure regulator from a minimum of 7.0" w.c. for the purpose of input adjustment to a maximum of 10.5" w.c.

Propane gas will have a manifold pressure approximately 10.0"w.c. at the pressure regulator outlet with the inlet pressure to the pressure regulator from a minimum of 11.0"w.c. for the purpose of input adjustment to a maximum of 13.0"w.c.

A test gage connection is located downstream of the gas appliance pressure regulator for measuring gas pressure. The connection is a 1/8 inch N.P.T. plugged tapping.

Millivolt Control Valve
The valve regulator controls the burner pressure which should be checked at the pressure test point. Turn captured screw counter clockwise 2 or 3 turns and then place tubing to pressure gauge over test point (Use test point “A” closest to control knob). After taking pressure reading, **be sure and turn captured screw clockwise firmly to re-seal.** Do not over torque. Check for gas leaks.

CLEARANCES

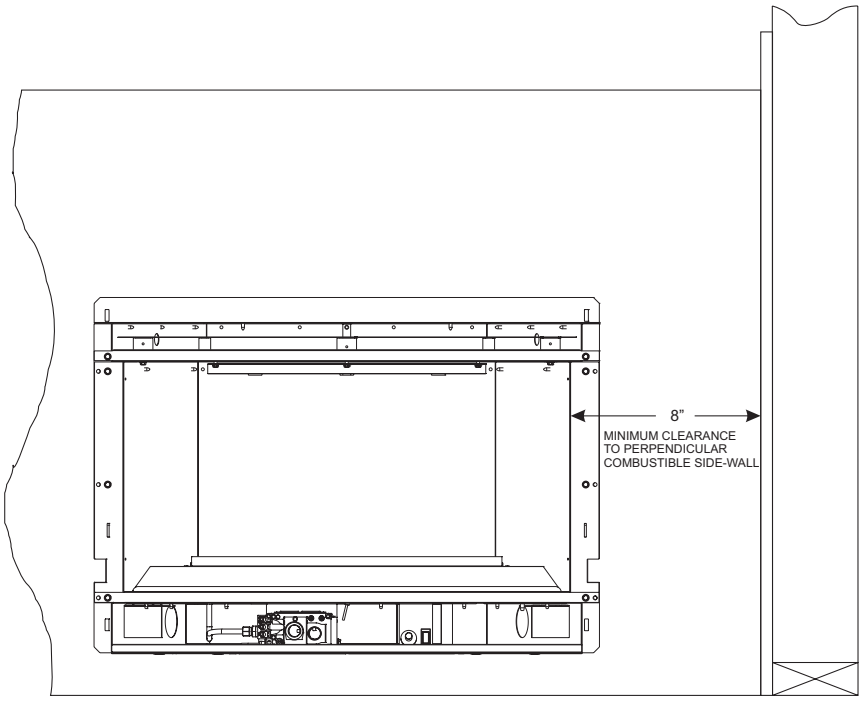
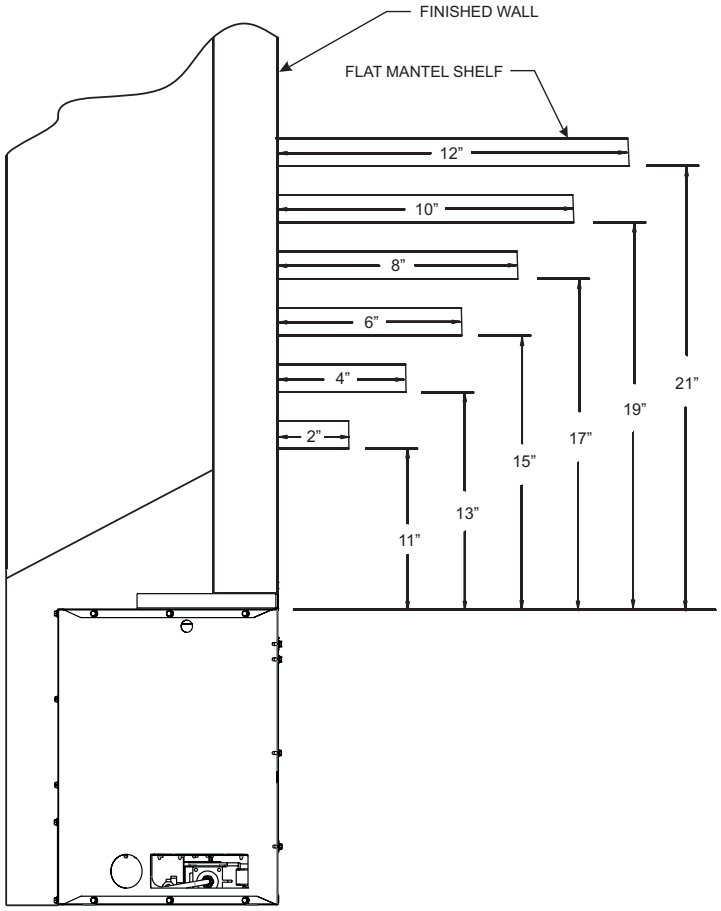
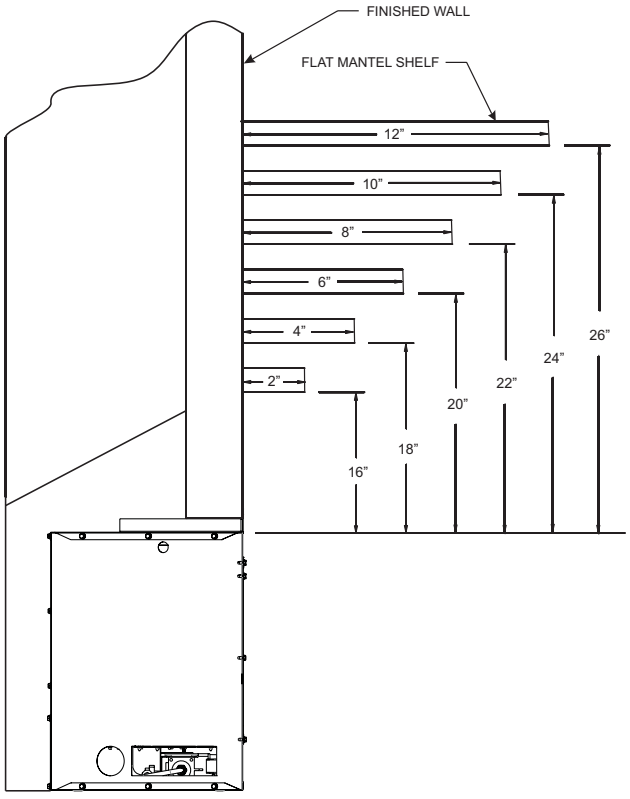


Figure 11

CLEARANCES (continued)



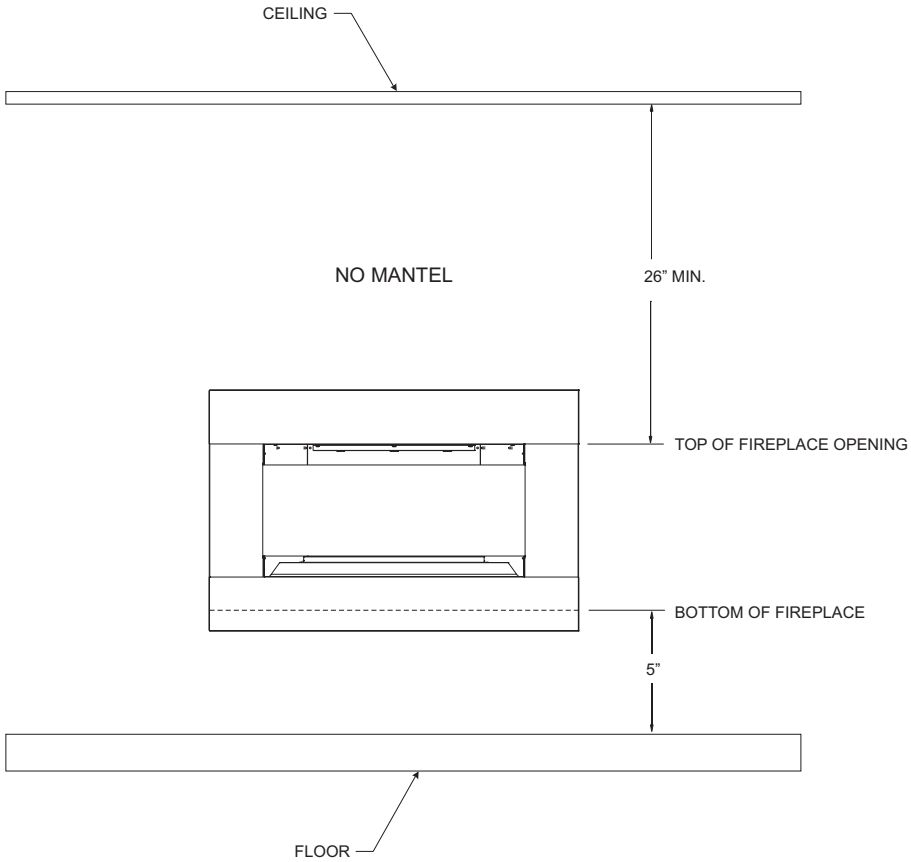
VFL20 Series Figure 12



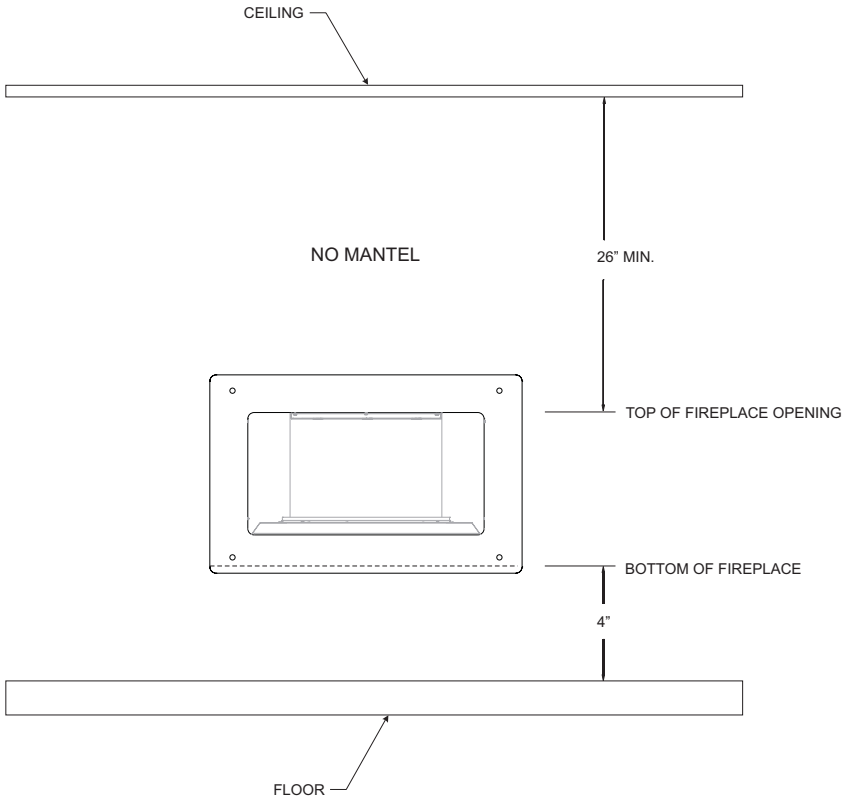
VFL28 Series Figure 13

CLEARANCES (continued)

Figures 14 and 15 pertain to VFL(20,28)IN Series.



Surround Clearances Figure 14



Glass Front Clearances Figure 15

COMBUSTIBLE MATERIALS

Combustible Material

No greeting cards, stockings or ornamentation of any type should be placed on or attached to the fireplace. The flow of heat can ignite combustibles.

Do not attach combustible material to the mantel of your fireplace. This is a fire hazard.

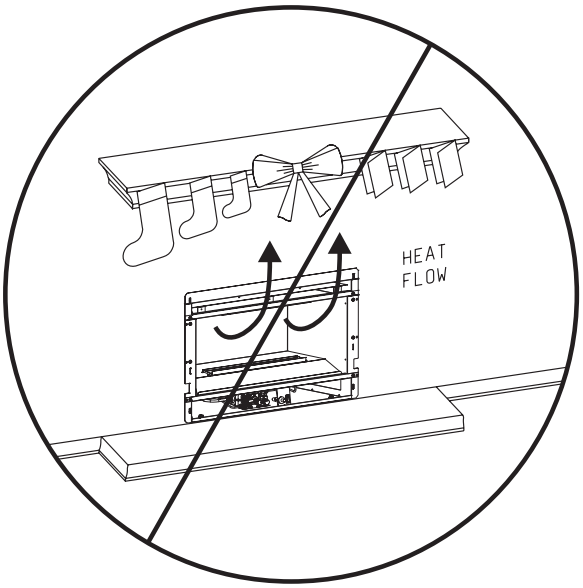


Figure 16

No greeting cards, stockings or ornamentation of any type should be placed on or attached to the fireplace. This is a heating appliance. The flow of heat can ignite combustibles.

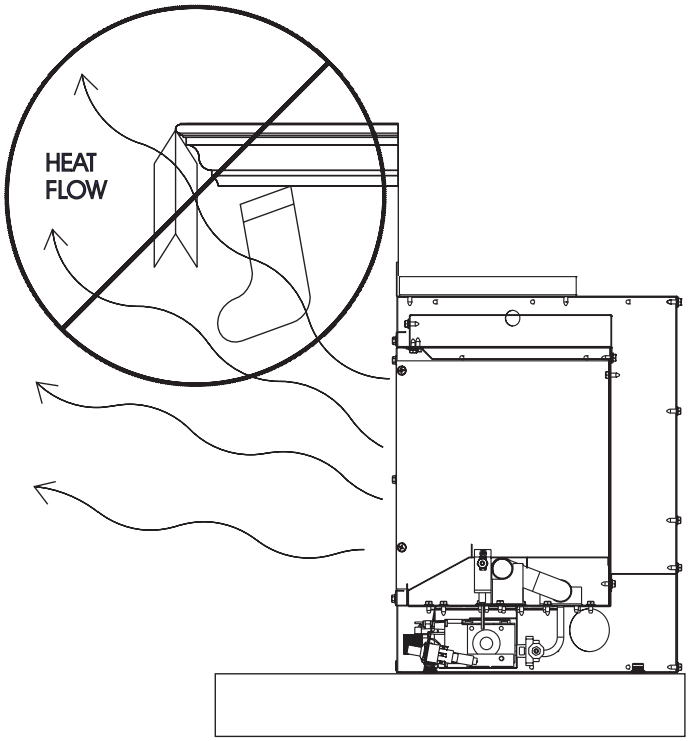


Figure 17

ALTERNATE ON/OFF SWITCH INSTALLATION

WIRING THE FIREPLACE

⚠ WARNING

Electrical wiring must be installed by a licensed electrician.

⚠ WARNING

DISCONNECT REMOTE CONTROLS IF YOU ARE ABSENT FOR EXTENDED TIME PERIODS. THIS WILL PREVENT ACCIDENTAL FIREPLACE OPERATION.

Installation of Alternate Surround Panel ON/OFF Switch on the millivolt control valve only.

An ON/OFF switch and wire assembly are provided. They are included in the instruction packet.
Do not cut wire or insulation on metal edges.
***Notice*: Refer to surround panel installation section in the Installation Instructions supplied with the surround for additional information on attachment.**

DF(20,28)MBL or DF(20,28)LBL Surround

1. Find the coiled low voltage wire assembly and ON/OFF switch located in the instruction packet.
2. Attach the flag terminal ends to the “TH/TP” and “TH” terminals on the front terminal block of the gas valve. **See Figure 19.**
3. Run the low voltage alternate switch wires up the back of the right or left surround panel. Then secure the wires with wire clips provided. **See Figure 18.**

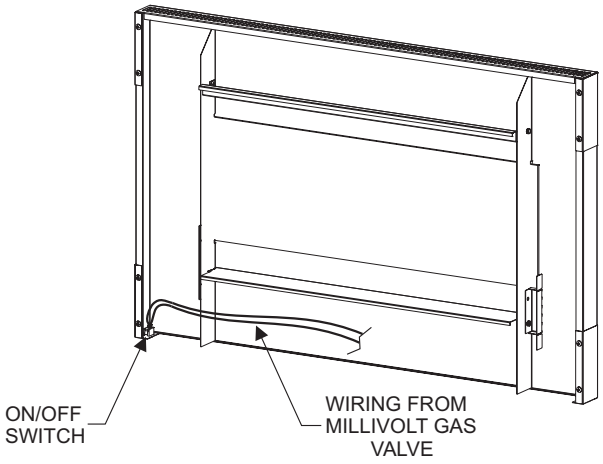
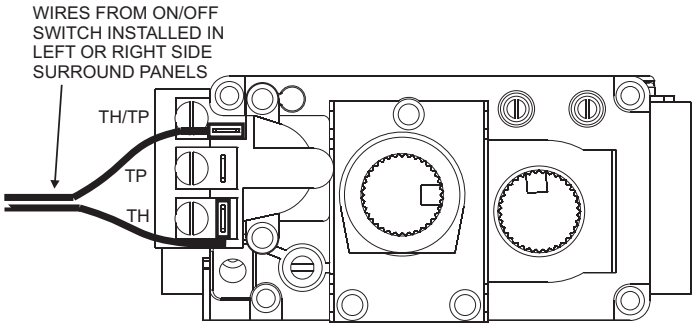


Figure 18 (DF20MBL Shown)
Insert ON/OFF switch into side panel then attach wire assembly from valve terminals.

4. Remove the switch knockout on the DF(20,28)BL surround, then install the ON/OFF switch into the switch bracket.
5. Connect the low voltage wires from the gas valve to the ON/OFF switch.

Note: The minimum clearance to the floor when using a DF(20,28)MBL surround is 2 inches. This clearance allows access to the ON/OFF switch.

6. Attach the surround panel assembly to the insert. Place the surround panel assembly against the face of the insert and align the lower retaining tabs with the notches on the insert sides. Lift the surround panel assembly slightly until the bottom return flange (top panel) is positioned over the top flange on the insert. This secures the surround panel assembly to the insert without screws.



NOTE: TO OPERATE INSERT WITH SIDE PANEL ON/OFF SWITCH, BE SURE TO PLACE THE MAIN SWITCH (TO THE RIGHT SIDE OF GAS VALVE) TO “**OFF**” POSITION

Figure 19

DECORATIVE ACCESSORY INSTALLATION

⚠ WARNING

Failure to position the parts in accordance with the diagrams and instructions below or failure to use only parts specifically approved for use with this heater may result in property damage or personal injury.

***Notice*: The Loft series burners may be operated with or without the Decorative accessory options. Follow the directions below should you choose to enhance your Loft burner with any one of the available decorative options.**

DECORATIVE GLASS ACCESSORY PLACEMENT

The Decorative Glass options are available in various colors and package sizes. Choose the size appropriate for your fireplaces. See list on page 9.

⚠ CAUTION

Use of gloves and eye protection is required while applying the decorative glass.

INSTALLATION

1. Application of the Decorative Glass should only be performed after the Loft burner has been fully installed, secured and tested for leaks. If operating the burner with a Remote Control, make sure all batteries are installed and that the Loft burner operates with the remote correctly.
3. To install the Decorative Glass, cut off a corner of the plastic bag and proceed to apply the glass to the rear shelf on the Loft burner (area behind the burner). Apply only enough glass to the Top Cover to cover the black metal surfaces. Do not allow the glass to fall around the burner tube. See Figures 20 to 21. Apply the remaining decorative glass to the front sloped surface of the Top Cover. Start by placing the glass along the front edge of the top cover, then gradually place the glass up the sloped top until completely covered. Do not allow the glass to fall around the burner tube. See Figure 22.

⚠ CAUTION

Glass must not be placed around the ends of the Loft burner assembly that would restrict air flow, or cover the gas valve.

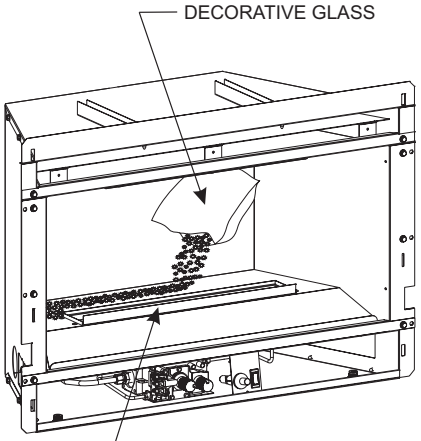

DECORATIVE GLASS
GLASS MUST NOT BE PLACED ON TOP OF OR NEXT TO BURNER. GLASS TO BE PLACED ONLY TO THE OUTSIDE OF THE FLANGED OPENING.

Figure 20

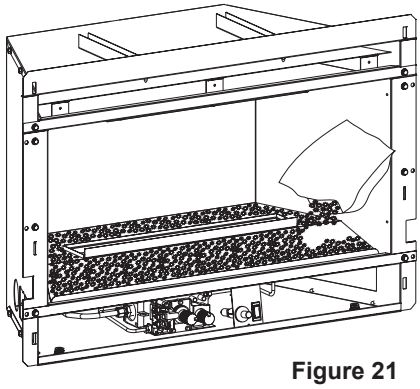


Figure 21

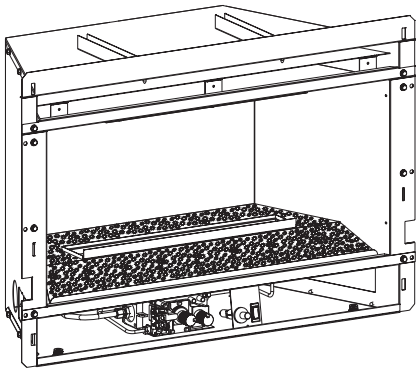


Figure 22

MILLIVOLT CONTROL VALVE LIGHTING INSTRUCTIONS

FOR YOUR SAFETY READ BEFORE LIGHTING

⚠ WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.

B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

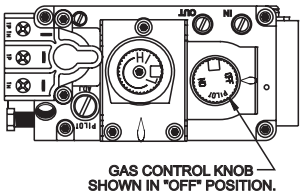
- **Do not try to light any appliance.**
- **Do not touch any electrical switch; Do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

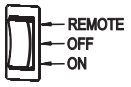
C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.

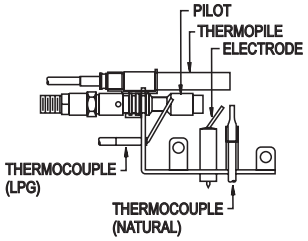
D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information label.
2. Open bottom louver assembly (if applicable).
3. Set REMOTE/OFF/ON switch to "OFF."
4. Turn off all electric power to the appliance (if applicable).
5. Push in gas control knob slightly and turn clockwise ↷ to "OFF."
   NOTE: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.
6. Wait ten (10) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above. If you do not smell gas, go to the next step.
7. Find pilot - Follow metal tube from gas control. The pilot is in front of the burner on the right side.
8. Turn gas control knob counterclockwise ↶ to "PILOT."
9. Push in control knob all the way and hold in. Repeatedly push the Piezo Ignitor Button until the pilot is lit. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob, and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 9.
   - If knob does not pop up when released, STOP and IMMEDIATELY call a qualified service technician or gas supplier.
   - If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
10. Turn gas control knob counterclockwise ↶ to "ON."
11. Set REMOTE/OFF/ON switch to desired setting.
12. Turn on all electric power to the appliance (if applicable).
13. Close bottom louver assembly (if applicable).







TO TURN OFF GAS TO APPLIANCE

1. Open bottom louver assembly (if applicable).
2. Set REMOTE/OFF/ON switch to "OFF."
3. Turn off all electric power to the appliance if service is to be performed (if applicable).
4. Push in gas control knob slightly and turn clockwise ↷ to "OFF." Do not force.
5. Close bottom louver assembly (if applicable).

10,000 BTU MILLIVOLT CONTROL VALVE LIGHTING INSTRUCTIONS

FOR YOUR SAFETY READ BEFORE LIGHTING

⚠ WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.

B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

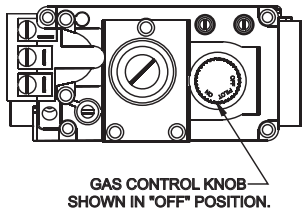
- **Do not try to light any appliance.**
- **Do not touch any electrical switch; Do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

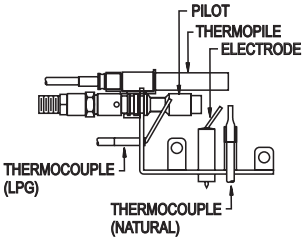
C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.

D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above.
2. Open bottom louver assembly, (if applicable).
3. Set REMOTE/OFF/ON switch to "OFF."
4. Turn off all electric power to the appliance (if applicable).
5. Push in gas control knob slightly and turn clockwise ↷ to "OFF."
6. Wait ten (10) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above. If you do not smell gas, go to the next step.
7. Find pilot - Follow metal tube from gas control. The pilot is located next to the burner, near the right side.
8. Turn gas control knob counterclockwise ↶ to "PILOT."
9. Push in control knob all the way and hold in. Repeatedly push the Piezo Ignitor Button until the pilot is lit. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob, and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 9.
   - If knob does not pop up when released, STOP and IMMEDIATELY call a qualified service technician or gas supplier.
   - If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
10. Turn gas control knob counterclockwise ↶ to "ON."
11. Set REMOTE/OFF/ON switch to desired setting.
12. Turn on all electric power to the appliance (if applicable).
13. Close bottom louver assembly (if applicable).





TO TURN OFF GAS TO APPLIANCE

1. Open bottom louver assembly (if applicable).
2. Set REMOTE/OFF/ON switch to OFF.
3. Turn off all electric power to the appliance if service is to be performed (if applicable).
4. Push in gas control knob slightly and turn clockwise ↷ to "OFF." Do not force.
5. Close bottom louver assembly (if applicable).

INTERMITTENT PILOT LIGHTING INSTRUCTIONS

FOR YOUR SAFETY READ BEFORE LIGHTING

⚠ WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. BEFORE LIGHTING, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- **Do not try to light any appliance**
- **Do not touch any electrical switch; Do not use any phone in your building**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

B. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

C. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

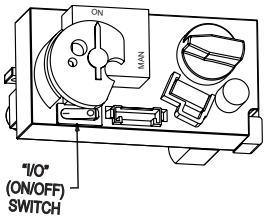
1. STOP! Read the safety information above on this page.
2. Open bottom louver assembly, (if applicable).
3. Press the "I/O" (ON/OFF) button on the valve face to "OFF."
4. Wait five (5) minutes to clear out any gas, then smell for gas including near the floor. If you smell gas, STOP! FOLLOW "B" in the safety information above. If you don't smell gas, go to the next step.

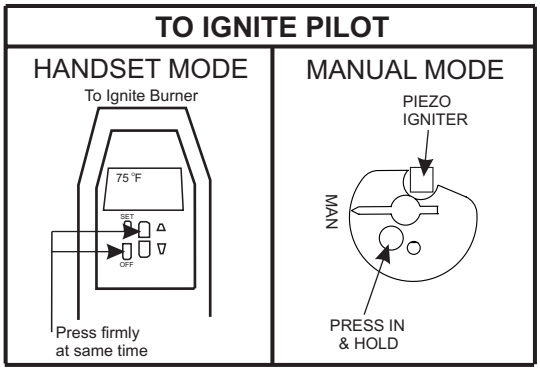
LIGHTING PROCEDURE - HANDSET METHOD

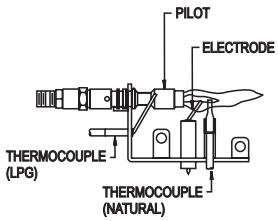
1. Turn control arrow on valve face to "ON." Press the "I/O" button to "I." Press the "OFF" **and** "UP" buttons on the handset, firmly at the same time. A long "beep" will sound, followed by 5 short "beeps." Ignitor will spark and will continue until pilot is lit. For full Remote Control operation see Appliance Installation manual.

LIGHTING PROCEDURE - MANUAL METHOD

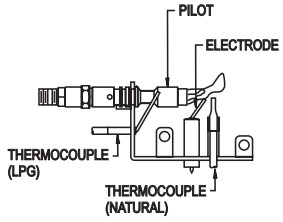
1. Press the "I/O" (ON/OFF) button to "I."
2. Turn control arrow on valve face to "MAN."
3. Using a small bladed screwdriver, press and hold button within hold on control. Manual depress piezo igniter button to light pilot. If pilot does not light, steps 2-3 can be immediately repeated. If the pilot will not stay lit after several tries, follow the instructions "To Turn Off Gas to Appliance" and call your service technician or gas supplier.
4. When the pilot is lit and stable, turn flame height control knob counterclockwise ↶ and the main burner will ignite. To adjust flame height, turn flame height control knob.







CORRECT PILOT FLAME



INCORRECT PILOT FLAME

TO TURN OFF GAS TO APPLIANCE

MANUAL MODE - To turn off main burner, turn flame height control knob fully clockwise ↷. To fully shut down, press "I/O" button to "O."

HANDSET MODE - Press "OFF" button on handset. To fully shut down, press "I/O" button to "O."

INTERMITTENT PILOT OPERATING INSTRUCTIONS

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

The 7 series Loft Fireplace operate with a GV60 battery-powered electronic remote ignition and control system.

Prior to operation of the 7 series Loft Fireplace, install (4) AA batteries into the Remote Receiver module, and (1) 9-volt battery into the hand held remote.

The remote control and receiver should be programmed together from the factory. All settings for time and temperature control must be set up by the user as desired.

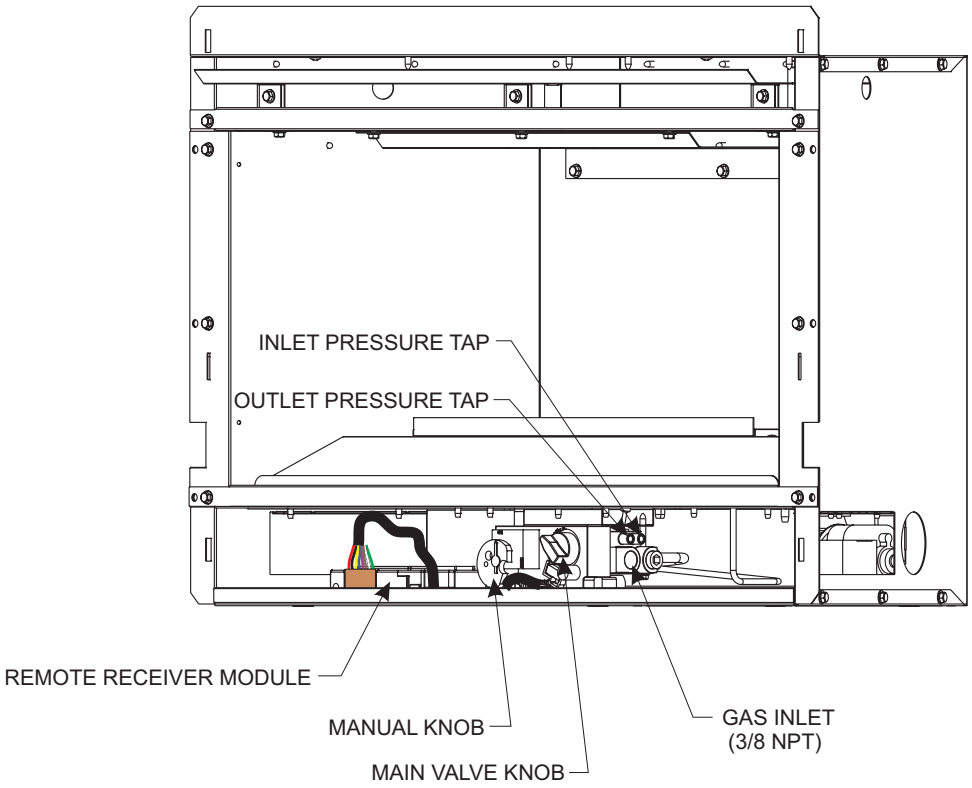


Figure 23

INTERMITTENT PILOT REMOTE ELECTRONIC IGNITION AND CONTROL SYSTEM

APPLICATION
GV60 is a battery-powered electronic and control system for gas appliances with pilot burners and ODS systems.

GENERAL NOTES
Radio Frequency Remote

433.92 MHz for Europe; 315 MHz for U.S. (FCC ID: RTD-G6R) and for Canada (IC: 4943A-G6R).

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Batteries - Remote Handset:

1 x 9V block (quality alkaline recommended)

Batteries - Receiver:

4 x 1.5V "AA" (quality alkaline recommended)

***Notice*:** An AC Mains Adapter may be used instead of batteries (only the Mertik Maxitrol or an AC Mains Adapter approved by Mertik Maxitrol can be used).

***Notice*:** During a power outage the AC Mains Adapter must be unplugged from the receiver to operate in the battery mode.

Timer/Thermostat RF
Remote Handset
G6R-H3T

INTERMITTENT PILOT REMOTE ELECTRONIC IGNITION AND CONTROL SYSTEM

AUTOMATIC OPERATION

⚠ WARNING

Wiring of valve and receiver must be completed before starting ignition. Failure to do so could damage the electronics.

SETTING THE ELECTRONICS CODE

***Notice*:** The remote control and receiver are pre-programmed at the factory. However, if for some reason they do not communicate to each other, follow these steps to re-program.

Radio Frequency Remote

A code is selected automatically for all Mertik Maxitrol electronics from among 65,000 random codes available. The receiver has to learn the code of the handset:

- Press and hold the receiver's reset button (see figure 23) until you hear two (2) beeps. After the second, longer beep, release the reset button.
- Within the subsequent 20 seconds press the (small flame) button on the remote handset until you hear an additional long beep confirming the code is set.

***Notice*:** This is a one time setting only, and is not required when changing the batteries in the remote or receiver.

Figure 24

TO TURN ON APPLIANCE

⚠ WARNING

When pilot ignition is confirmed, motor turns automatically to maximum flame height.

- Turn MANUAL knob to the ON, full counterclockwise position (See Figure 25).
- Place ON/OFF switch (if equipped) in (ON position).

Standard, Display, Timer/Thermostat RF Remote Handset

- Simultaneously press and hold the **OFF** and (large flame) buttons until a short beep confirms the start sequence has begun; release buttons.
- Continuing beeps confirm the ignition is in process.
- Once pilot ignition is confirmed, there is main gas flow.
- After the ignition the remote will go automatically into temperature control mode.

***Caution*:** If the pilot does not stay lit after several tries, turn the main valve knob to **OFF** and follow the instructions "Turn Off Gas to Appliance" (See page 26).

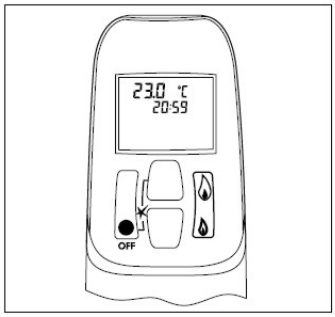


Figure 25

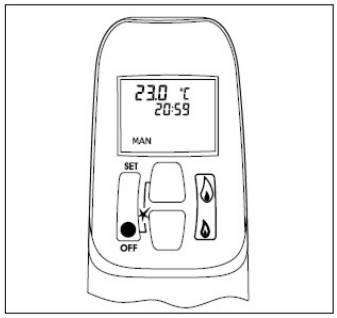


Figure 26

TO TURN OFF APPLIANCE

Press OFF button on remote handset.

***Notice*: Press** (small flame) to turn main gas to pilot gas.

ADJUSTMENT - FLAME HEIGHT

Standard, Display, Timer/Thermostat RF Remote Handsets

- In standby mode: Press (large flame) to increase flame height.
- Press (small flame) to decrease flame height or to set appliance at pilot flame.
- For fine adjustment tap the large/small flames.

Quick Flame Adjust - Display, Timer/Thermostat RF Remote Handset

- If (large flame) or (small flame) are pressed for 0.5 seconds, the motor will turn the valve to high fire or pilot flame.

***Caution*:** If the appliance will not operate, follow the instructions "TURN OFF GAS TO APPLIANCE" (See page 26).

SETTING °C/24 HOUR OR °F/12 HOUR CLOCK

Display, Timer/Thermostat RF Remote Handsets

- Press **OFF** and (small flame) until display changes from Fahrenheit/12 hour clock to Celsius/24 hour clock and vice versa.

INTERMITTENT PILOT REMOTE ELECTRONIC IGNITION AND CONTROL SYSTEM

SETTING THE TIME
Display, Timer/Thermostat RF Remote Handsets

- The display will flash after either:
  a. Installing the battery or
  b. Simultaneously pressing the (large flame) and (small flame)
- Press (large flame) to set the hour and the (small flame) to set the minute.
- Press OFF to return to manual mode or simply wait and it will automatically return to the manual mode.

CHANGING THE MODE OF OPERATION
Briefly pressing the **SET** button changes the mode of operation in the following order:

Notice: MANUAL mode can also be reached by pressing either the (large flame) or the (small flame).
and back to
MAN → ☀TEMP → ☽TEMP → TIMER → MAN

MAN **Mode -**

Manual Flame Height Adjustment

- Press (large flame) to turn on the main burner.
- Press (large flame) to increase the flame height.
- Press (small flame) to decrease the flame height or to go to pilot standby position.

***Notice*:** While pressing either button a symbol indicating transmission appears on the display. The receiver confirms transmission with a beep.

☀TEMP **- Daytime Temperature Mode**
(appliance must be in standby mode; pilot ignited): The room temperature is measured and compared to the set temperature. The flame height is then automatically adjusted to achieve the Daytime set temperature.

☽TEMP **- Nighttime Setback Temperature Mode**
(appliance must be in standby mode; pilot ignited):
The room temperature is measured and compared to the Nighttime Setback temperature. The flame height is then automatically adjusted to achieve the Nighttime Setback temperature.

TIMER **- Timer Mode**
(appliance must be in standby mode; pilot ignited):
The timer setting allows you to set two (2) burner ☀TEMP times and two (2) burner ☽TEMP times every 24 hours.
For ☽TEMP to operate as a thermostat, TEMP must be set at 40°F (4°C) or higher.
If the ☽TEMP setting is decreased to ≤ 39°F (3.9°C), the motor will turn the valve to the standby position in the moon times and await the next burner ☀TEMP cycle.

***Notice*:** The display shows the set temperature every 30 seconds.

SETTING THE TEMPERATURE

- Select either the ☀TEMP MODE or the ☽TEMP MODE by briefly pressing the SET button.
- Hold the **SET** button until the TEMP display flashes.
- Set the desired temperature with (large flame) or (small flame).
- Press **OFF** or simply wait to complete programming.
- ***Notice*:** When the desired room temperature is SET on the hand held remote, the burner will automatically turn on when the room temperature drops 3 degrees Fahrenheit (F) below the SET temperature. The remote system will turn the burner off when the room temperature reaches 3 degrees Fahrenheit (F) above the SET temperature. The pilot will remain lit between burner cycles when using the thermostatic remote control feature.

SETTING THE TIMER

- Select Timer mode by briefly pressing the SET button.
- Press and hold the SET button until the P1 ☀ (sun symbol) is displayed and the time flashes. Set the hour by pressing the (large flame) and set the minutes by pressing the (small flame).
- Briefly press **SET** button for the next burner cycle time.
- Example: P1 ☽ (moon symbol) continue through P2 ☀ (sun symbol) and P2 ☽ (moon symbol).
- Once all four (4) times are set, press **OFF** or simply wait to complete programming.

MANUAL OPERATION
Follow appliance lighting instructions for gaining access to the gas control and the pilot burner. Access to the pilot burner is only required for ignition with a match.

When turning main valve knob, do not force. Knob has a slip clutch that clicks until the end stops are reached. This allows for manual flame height adjustment as well as adjustment to pilot standby position.

1. **STOP!** Read the safety information included before proceeding.
2. Turn main valve knob to the **OFF**, full clockwise position.
3. Turn MANUAL knob to the **MAN**, full clockwise position.
4. Place ON/OFF switch (if equipped) in **O** (OFF position).
5. Wait five (5) minutes to clear out any gas. Verify that no gas is in the area around the appliance, including near the floor. **If you detect gas STOP!** Follow "A" in the safety information on page 26. If no gas is present, proceed to step 6.
6. Place ON/OFF switch in ▌(ON position).

INTERMITTENT PILOT REMOTE ELECTRONIC IGNITION AND CONTROL SYSTEM

7. With the MANUAL knob in **MAN** position a manual pilot valve operator and piezo igniter are accessible.

   Ignition with match:
   Fully push down manual pilot valve operator and hold in, to start pilot gas flow.
   Immediately light the pilot with a match, while continuing to hold in the manual pilot valve operator for about one (1) minute after the pilot is lit. Release manual pilot valve operator. If pilot does not stay lit, wait five (5) minutes and repeat.

   Ignition with piezo igniter:
   Change the ignition cable from the receiver to the valve. Use the push piezo igniter to ignite. If pilot does not stay lit, wait five (5) minutes and repeat.
   ***Caution*:** If the pilot does not stay lit after several tries, turn the gas control knob (main valve knob) to **OFF** and proceed to step 11.
8. If applicable, reinstall the top cover on the burner base before proceeding.
9. Turn MANUAL knob to the **ON**, full counterclockwise position.
10. Turn main valve knob to the full **ON**, full counterclockwise position.
11. If the appliance will not operate, follow the instructions "TURN OFF GAS TO APPLIANCE" and call the service technician or gas supplier.

TURN OFF GAS TO APPLIANCE

- Press OFF button on remote.
- Follow appliance instructions for gaining accessibility to the gas control.
- Place ON/OFF switch in **O** (off position).
- Turn main valve knob to the **OFF** full clockwise position.
- Replace appliance top cover.

MISCELLANEOUS

Low Battery Indication

Receiver:
three short beeps will sound when motor turns
Remote with display:
"BATT" will appear on display

***Notice*:** Thermostatic Displays/Handsets: If the battery of the handset is low or if the transmitter is out of the communication range, the motor turns down the valve to pilot gas after 6 hours.

***Notice*:** With very low battery the GV60 system shuts off the fire completely. This will not happen if the power supply is interrupted.

Battery replacement

Battery replacement is recommended at the beginning of each heating season. Do not use metal tools to remove batteries. Using a metal tool could cause a short that may damage the receiver.

Location of Receiver

When the RF-receiver is placed in the appliance, the surrounding metal can reduce reception considerably. The position of th antenna on the receiver also influences reception. It is recommended to straighten the antenna. The antenna must not come in contact or cross the ignition wire, this may render the receiver inoperable.

⚠ **CAUTION:** Keep receiver free from debris and dirt. Protect the receiver with a plastic bag until all construction is complete.

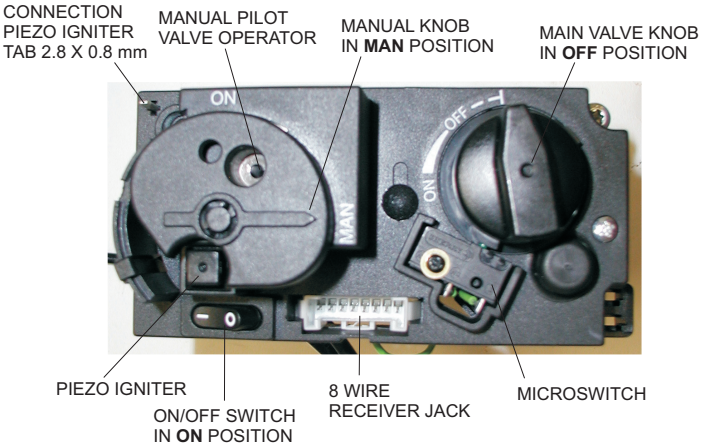


Figure 27

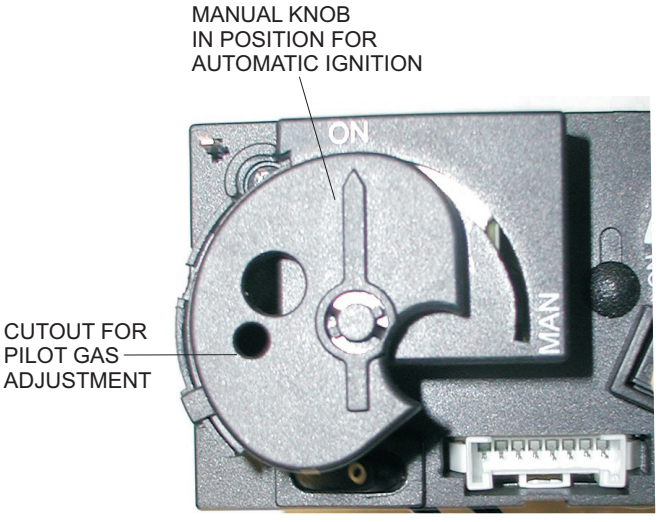
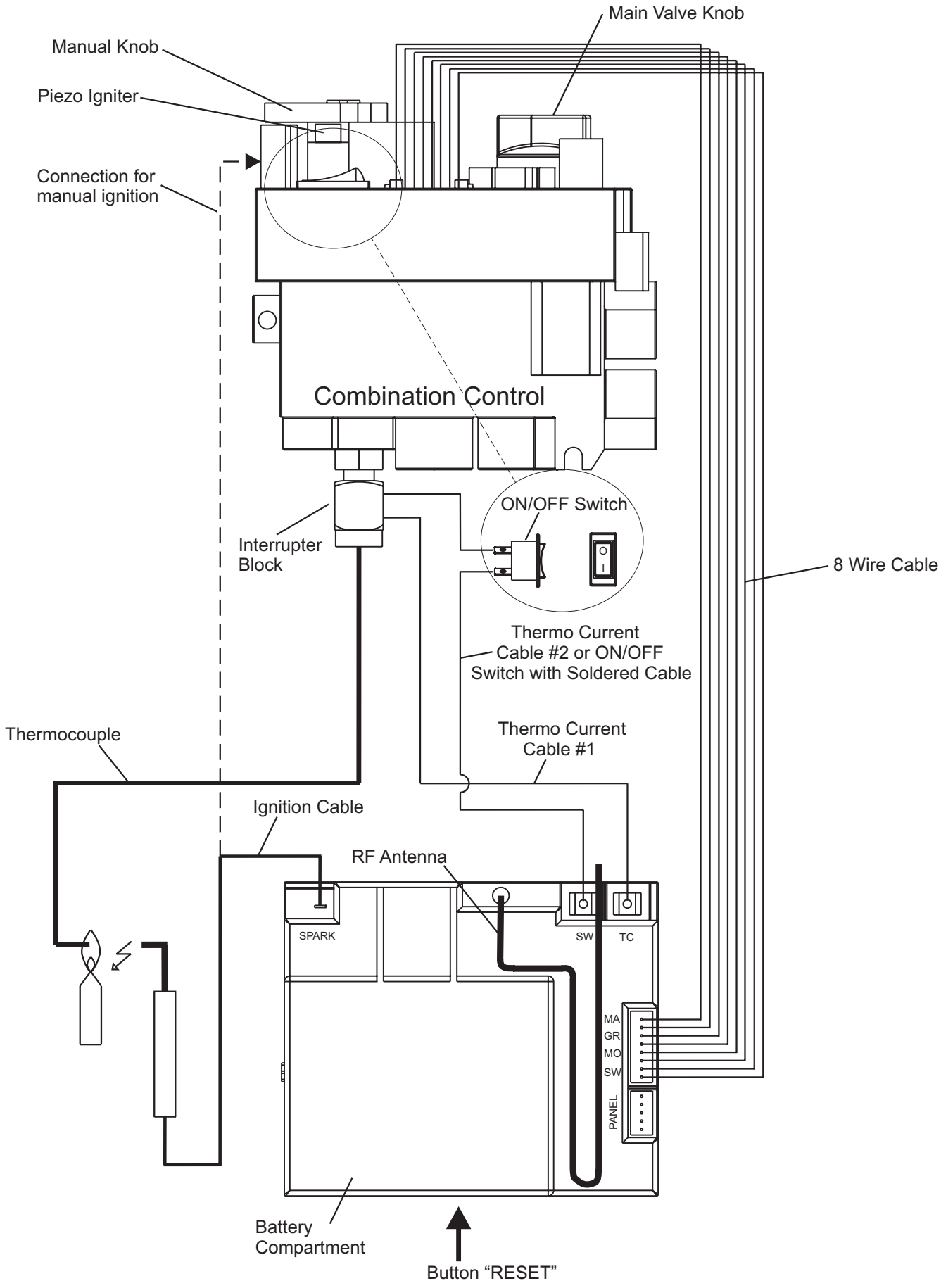


Figure 28

INTERMITTENT PILOT WIRING DIAGRAM



OPERATION INSTRUCTIONS/FLAME APPEARANCE

Flames from the pilot (front center of burner) as well as the main flame should be visually checked as the fireplace is installed.

In normal operation at full rate after 10 to 15 minutes, the flame appearance should be sets of yellow flames.

***Notice*:** All flames will be random by design, flame height will go up and down.

Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into fireplace. Do not place a blower inside the burner area of the firebox. Ceiling fans may create drafts that alter flame patterns. Sooting and improper burning will result.

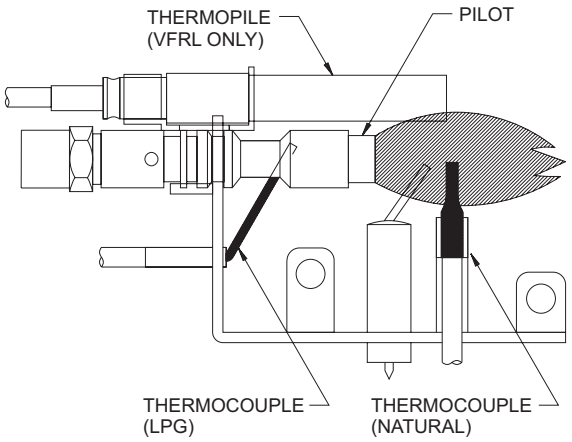
During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not harmful, but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance, possibly causing headaches or eye or lung irritation. This is a normal and temporary occurrence.

The initial break-in operation should last 2-3 hours with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in will be slight and will disappear with continued use.

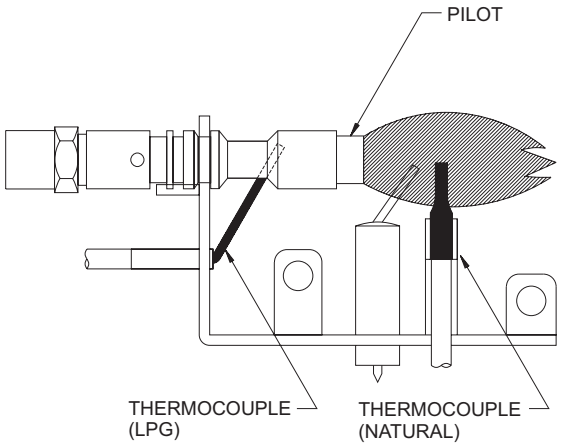
Once the break in operation has been completed, adjust the heater to the desired output and then replace the surround.

PILOT FLAME CHARACTERISTICS

Figures 29 and 30 show a correct pilot flame pattern. The correct flame will be blue and will extend beyond the thermocouple. The flame will surround the thermocouple just below the tip. A slight yellow flame may occur where the pilot flame and main burner flame meet. Figures 31 and 32 show an incorrect pilot flame pattern. The incorrect pilot flame is not touching the thermocouple. This will cause the thermocouple to cool. When the thermocouple cools, the heater will shut down.

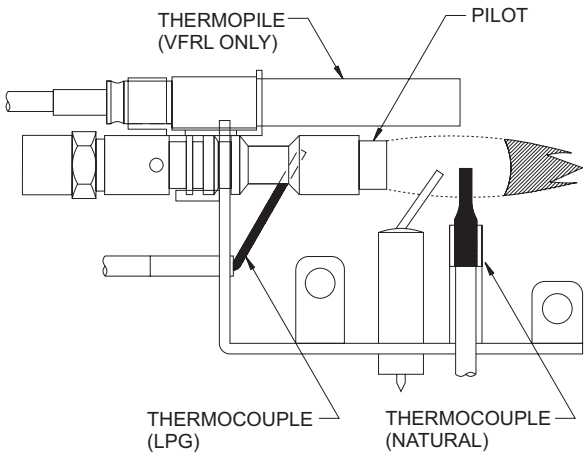


Correct Pilot Flame Pattern for MILLIVOLT
Figure 29

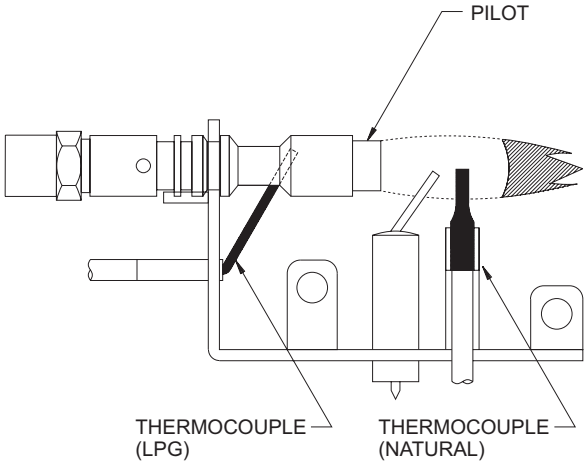


Correct Pilot Flame Pattern for INTERMITTENT PILOT

Figure 30



Incorrect Pilot Flame Pattern for MILLIVOLT
Figure 31



Incorrect Flame Pattern for INTERMITTENT PILOT
Figure 32

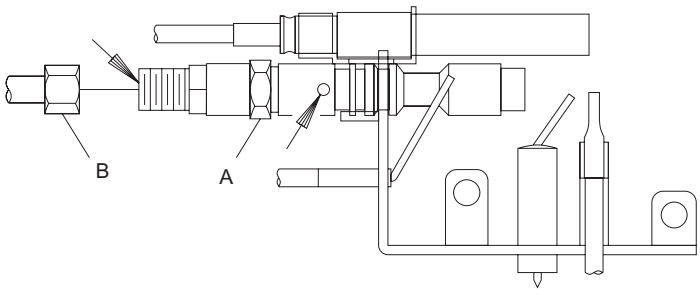
If pilot flame pattern is incorrect, as shown in Figures 31 and 32

- See Troubleshooting, page 37.

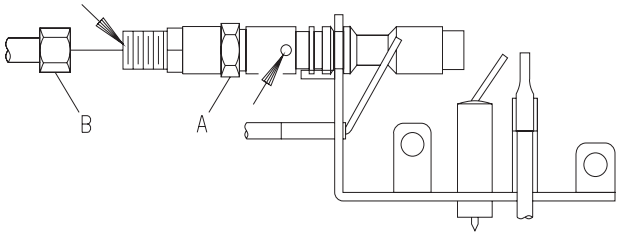
PILOT FLAME CHARACTERISTICS

Cleaning and Maintenance/Pilot
Oxygen Depletion Sensor Pilot (Figures 33 and 34)
When the pilot has a large yellow tip flame, clean the Oxygen Depletion Sensor as follows:

1. Clean the ODS pilot by loosening nut B from the pilot tubing. When this procedure is required, grasp nut A with an open end wrench.
2. Blow air pressure through the holes indicated by the arrows. This will blow out foreign materials such as dust, lint and spider webs. Tighten nut B also by grasping nut A.



MILLIVOLT PILOT
Figure 33



INTERMITTENT PILOT
Figure 34

CLEANING AND SERVICING

Annual inspection and cleaning by your dealer or qualified service technician is recommended to prevent malfunction and/or sooting.

TURN OFF HEATER AND ALLOW TO COOL BEFORE CLEANING.
Remove any optional decorative covers or decorative glass material. Gloves are recommended.

PERIODIC CLEANING - Refer to parts diagram for location of items discussed below.

- Do not use cleaning fluid to clean any part of heater.
- Remove loose particles and dust from the burner, controls and grate.
- Inspect and clean burner air intake hole. Remove lint or particles with brush. Failure to keep air intake hole clean will result in sooting and poor combustion.

ANNUAL CLEANING/INSPECTION - Refer to parts diagram for location of items discussed below.

- Inspect and clean burner air intake hole. Remove lint or particles with vacuum or brush. Failure to keep air intake hole clean will result in sooting and poor combustion.
- Inspect and clean all burner ports.
- Inspect ODS pilot for operation and accumulation of lint at air intake holes.
- Verify flame pattern for proper operation.
- Verify smooth and responsive ignition of main burner.

WIRING

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

Millivolt thermopile is self powered, gas valve does not require 110 volts. Maximum length of 20 feet of 16 AWG to conductor wires is to be used with all optional switches.

Use the two leads (Red and Green) to attach optional components.

Check 750 Millivolt System Operation
Millivolt system and all individual components may be checked with a millivolt meter 0-1000 MV range.

Remote Receiver
Use the following steps to place the remote receiver adjacent to the gas valve.
Attention: The remote receiver bracket is not used in this installation.

1. The remote receiver can not be placed behind the gas valve and burner assembly.
2. When facing the appliance, the remote receiver must be placed to the right of the gas valve.

Install remote control receiver behind bottom louver.

Refer to remote control installation and operating instructions for more details on remote control.

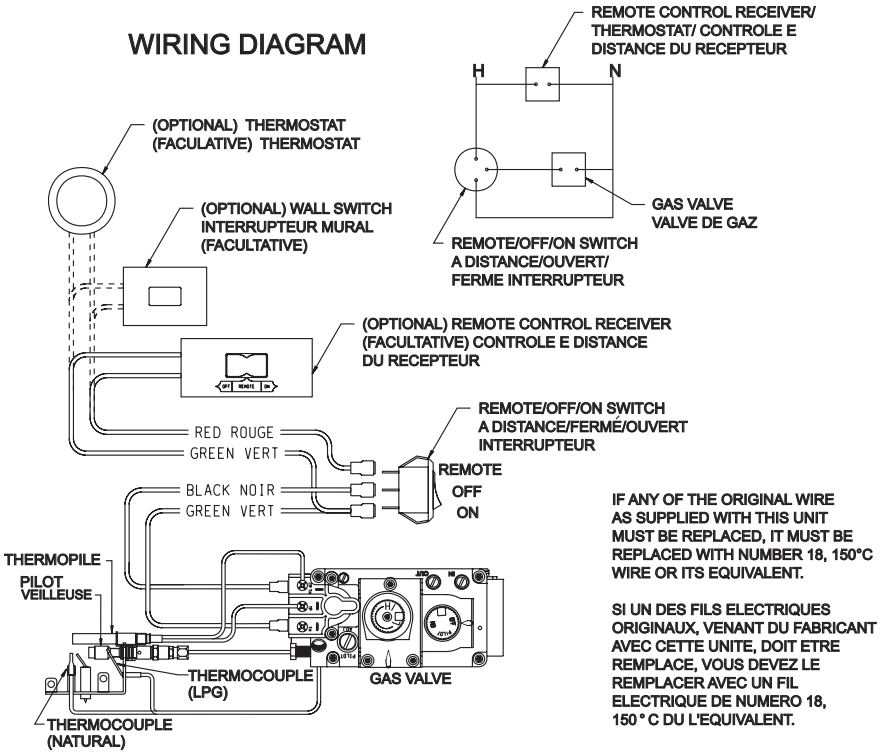


Figure 35

MAINTENANCE

Keep the control compartment and burner area clean by vacuuming or brushing area at least twice a year.

THE FIREPLACE CAN GET VERY HOT – HANDLE ONLY WHEN COOL.

Always turn off gas to the pilot before cleaning. For relighting, refer to lighting instructions located on the rating plate of the fireplace.

Never obstruct the flow of the combustion and ventilation air. Keep the front of the fireplace clear of all obstacles and materials.

Leave at least 36" clearance from the front of the fireplace.

Front should be installed during operation.

TROUBLESHOOTING
SYMPTOMS, POSSIBLE CAUSES AND CORRECTIONS

1. **When ignitor button is pressed, there is no spark at ODS/ pilot.**
   a. Ignitor electrode positioned wrong - Replace pilot.
   b. Ignitor electrode is broken - Replace pilot.
   c. Ignitor electrode not connected to ignitor cable - Reconnect ignitor cable.
   d. Ignitor cable pinched or wet. Keep ignitor cable dry - Free ignitor cable if pinched by any metal or tubing.
   e. Broken ignitor cable - Replace ignitor cable.
   f. Bad piezo ignitor - Replace piezo ignitor.
2. **Appliance produces unwanted odors.**
   a. Appliance burning vapors from paint, hair spray, glues, etc. - Ventilate room. Stop using odor causing products while heater is running.
   b. Gas leak - Locate and correct all leaks.
3. **Appliance shuts off during use. (Pilot and main burner are off.)**
   a. Not enough fresh air is available for ODS/pilot to operate - Open window and/or door for ventilation.
   b. Low line pressure - Contact local gas company.
   c. ODS/pilot is partially clogged - Clean ODS/pilot.
   d. Defective thermocouple - Replace pilot.
4. **Appliance shuts off during use. (Pilot stays on.)**
   a. Low line pressure - Check line pressure to the valve.
   b. Defective thermopile - Check pilot flame, check wire connections, output should be a minimum of 325 millivolts across. TH/TP and TP terminals with REMOTE/OFF/ON switch off.
5. **Gas odor even when control knob is in OFF position.**
   a. Gas leak - Locate and correct all leaks.
   b. Control valve defective - Replace control valve.
6. **When ignitor button is pressed, there is spark at ODS/pilot, but no ignition.**
   a. Gas supply turned off or manual shutoff valve closed - Turn on gas supply or open manual shutoff valve.
   b. Control knob not in PILOT position - Turn control knob to PILOT position.
   c. Control knob not pressed in while in PILOT position - Press in control knob while in PILOT position.
   d. Air in gas lines when installed - Continue holding down control knob. Repeat igniting operation until air is removed.
   e. ODS/pilot is clogged - Replace ODS/pilot assembly or get it serviced.
   f. Gas regulator setting is not correct - Replace gas regulator.
7. **ODS/pilot lights but flame goes out when control knob is released.**
   a. Control knob not fully pressed in - Press in control knob fully.
   b. Control knob not pressed in long enough - After ODS/pilot lights, keep control knob pressed in 30 seconds.
   c. Manual Shutoff valve not fully open - Fully open manual shutoff valve.
   d. Thermocouple connection loose at control valve - Hand tighten until snug, then tighten 1/4 turn more.
   e. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by either low gas pressure or dirty or partially clogged ODS/pilot - Contact local gas company.
   f. Thermocouple damaged - Replace thermocouple.
   g. Control valve damaged - Replace control valve.
8. **Burner does not light after ODS/pilot is lit.**
   a. Burner orifice clogged - Clean burner or replace main burner orifice.
   b. Burner orifice diameter is too small - Replace burner orifice.
   c. Inlet gas pressure is too low - Contact qualified service person.
9. **If burning at main burner orifice occurs (a loud, roaring blow torch noise).**
   a. You must turn off burner assembly and contact a qualified service person.
   b. Manifold pressure is too low - Contact local gas company.
   c. Burner orifice clogged - Clean burner or replace burner orifice.
10. **Heater produces a whistling noise when main burner is lit.**
    a. Turning control knob to HIGH position when main burner is cold - Turn control knob to LOW position and let warm up for a minute (does not apply to 10k BTU models)
    b. Air in gas line - Operate burner until air is removed from line. Have gas line checked by local gas company.
    c. Dirty or partially clogged burner orifice - Clean burner or replace burner orifice.

If the gas quality is bad, your pilot may not stay lit, the burners may produce soot and the heater may backfire when lit. If the gas quality or pressure is low, contact your local gas supplier immediately.

MASTER PARTS DISTRIBUTOR LIST

To Order Parts Under Warranty, please contact your local Empire dealer. See the dealer locator at www.empirecomfort.com. To provide warranty service, your dealer will need your name and address, purchase date and serial number, and the nature of the problem with the unit.

To Order Parts After the Warranty Period, please contact your dealer or one of the Master Parts Distributors listed below. This list changes from time to time. For the current list, please click on the Master Parts button at www.empirecomfort.com.

Please note: Master Parts Distributors are independent businesses that stock the most commonly ordered Original Equipment repair parts for Heaters, Grills, and Fireplaces manufactured by Empire Comfort Systems Inc.

Dey Distributing
1401 Willow Lake Boulevard
Vadnais Heights, MN 55101

Phone: 651-490-9191
Toll Free: 800-397-1339
Website: www.deydistributing.com
Parts: Heater & Hearth

East Coast Energy Products
10 East Route 36
West Long Branch, NJ 07764

Phone: 732-870-8809
Toll Free: 800-755-8809
Fax: 732-870-8811
Website: www.eastcoastenergy.com
Parts: Heater & Hearth and Grills

Victor Division of F. W. Webb Company
200 Locust Street
Hartford, CT 06114

Phone: 860-722-2433
Toll Free: 800-243-9360
Fax: 860-293-0479
Toll Free Fax: 800-274-2004
Websites: www.fwwebb.com & www.victormfg.com
Parts: Heater & Hearth and Grills

HOW TO ORDER REPAIR PARTS

Parts Not Under Warranty

Parts can be ordered through your Service Person, Dealer, or a Master Parts Distributor. See this page for the Master Parts Distributors list. For best results, the **service person or dealer** should order parts through the distributor. Parts can be shipped directly to the **service person/dealer**.

Warranty Parts

Warranty parts will need a proof of purchase and can be ordered by your Service Person or Dealer. Proof of purchase is **required** for warranty parts.

All parts listed in the Parts List have a Part Number. When ordering parts, first obtain the Model Number and Serial Number from the name plate on your equipment. Then determine the Part Number (**not** the Index Number) and the Description of each part from the following illustration and part list. Be sure to give all this information . . .

Appliance Model Number _____ Part Description _____

Appliance Serial Number _____ Part Number _____

Type of Gas (Propane or Natural) _____

Do not order bolts, screws, washers or nuts. They are standard hardware items and can be purchased at any local hardware store.

Shipments contingent upon strikes, fires and all causes beyond our control.

VFL20IN PARTS LIST

Index No.	Part No.	Description
COMMON PARTS		
1	27559	FIREBOX BAFFLE
2	27406	BURNER ASSEMBLY COVER
3	28056	FIREBOX BOTTOM
4	28055	BLOWER SHIELD
5	27085	BURNER SUPPORT
6	R7624	AIR SHUTTER
7	R7572	JAMB NUT 1/4"-18 NPS
8	27086	BURNER END SUPPORT
10	P200	ORIFICE FITTING
VFL20IN3 MILLIVOLT MODEL		
9	P182	ORIFICE #55 - LP
9	P288	ORIFICE #48 - NAT
11	R10410	TUBE BURNER
12	R3623	PILOT ASSEMBLY - LP
12	R3624	PILOT ASSEMBLY - NAT
13	27147	TUBING ASSEMBLY - INLET
14	27093	TUBING ASSEMBLY - REGULATOR TO PILOT - NAT
15	R7063	PILOT REGULATOR - NAT
16	27094	TUBING ASSEMBLY - VALVE TO REGULATOR NAT
17	27092	TUBING ASSEMBLY - PILOT - LP
18	26161	VALVE BRACKET
19	R3625	VALVE - LPG
19	R3626	VALVE - NAT
22	26162	PIEZO BRACKET
23	R3436	REMOTE OFF/ON SWITCH
24	R9760	PIEZO IGNITOR
25	27223	PILOT BRACKET
NS		IGNITOR WIRE
NS		REMOTE/OFF/ON HARNESS
VFL20IN3 10,000 BTU/HR MILLIVOLT MODEL		
9	P193	ORIFICE #64 - LP
9	P214	ORIFICE #53 - NAT
11	R10477	TUBE BURNER
12	R3623	PILOT ASSEMBLY - LP
12	R3624	PILOT ASSEMBLY - NAT
13	27147	TUBING ASSEMBLY - INLET
14	27093	TUBING ASSEMBLY - REGULATOR TO PILOT - NAT
15	R7063	PILOT REGULATOR - NAT
16	27094	TUBING ASSEMBLY - VALVE TO REGULATOR - NAT

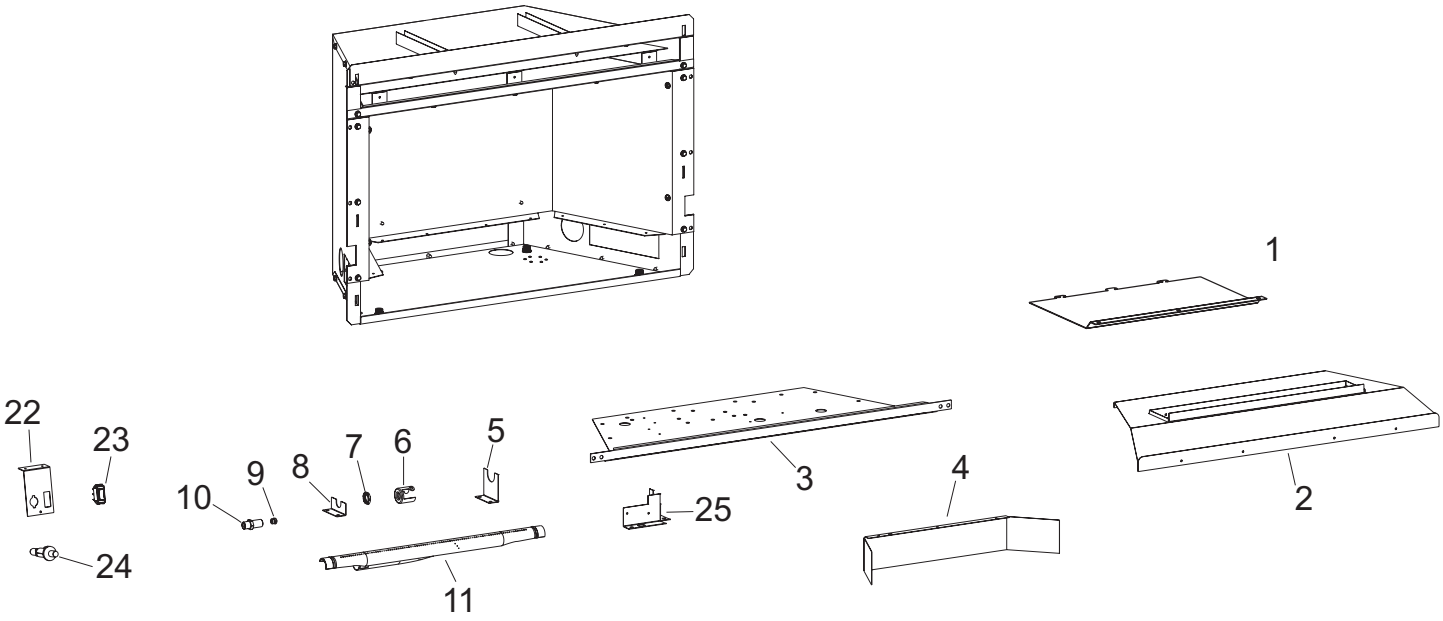
Index No.	Part No.	Description
VFL20IN3 10,000 BTU/HR MILLIVOLT MODEL (CONT.)		
17	27092	TUBING ASSEMBLY - PILOT - LP
18	26161	VALVE BRACKET
19	R9369	VALVE, 10,000 - LP
19	R9368	VALVE, 10,000 - NAT
22	26162	PIEZO BRACKET
23	R3436	REMOTE OFF/ON SWITCH
24	R9760	PIEZO IGNITOR
25	27223	PILOT BRACKET
NS		IGNITOR WIRE
NS		REMOTE/OFF/ON HARNESS
VFL20IN7 INTERMITTENT PILOT MODEL		
9	P182	ORIFICE #55 - LP
9	P300	ORIFICE #48 - NAT
11	R10410	TUBE BURNER
12	R5170	PILOT - LP
12	R5171	PILOT - NAT
13	27148	TUBING ASSEMBLY - INLET
14	27145	TUBING ASSEMBLY - REGULATOR TO PILOT - NAT
15	R7063	PILOT REGULATOR - NAT
16	27094	TUBING ASSEMBLY - VALVE TO REGULATOR - NAT
17	27095	TUBING ASSEMBLY - PILOT
18	27091	VALVE BRACKET
19	27472	VALVE - LPG
19	27471	VALVE - NAT
20	R10566	ELECTRONIC CONTROL THERMOSTAT
21	R10567	WIRE HARNESS - 8 PIN
25	27404	PILOT BRACKET
26	R10565	REMOTE CONTROL THERMOSTAT
NS	R10568	IGNITOR WIRE
NS	R10569	SWITCH AND WIRE ASSEMBLY
NS	R10570	THERMOCOUPLE WIRE ASSEMBLY
NS	R10572	THERMOCOUPLE CONNECTOR
NS	R10564	REMOTE CONTROL KIT (INCLUDES #20, 21, & 26)

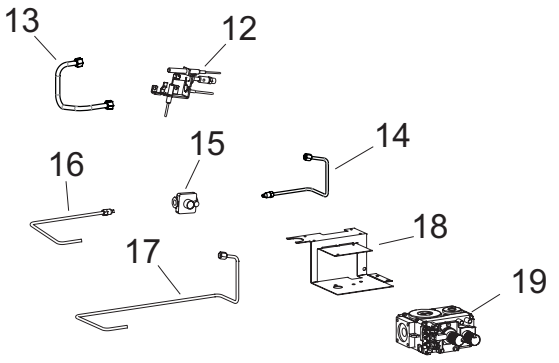
VFL28IN PARTS LIST

Index No.	Part No.	Description
		COMMON PARTS
1	27570	FIREBOX BAFFLE
2	27571	BURNER ASSEMBLY COVER
3	27554	FIREBOX BOTTOM
4	28055	BLOWER SHIELD
5	27085	BURNER SUPPORT
6	R7624	AIR SHUTTER
7	R7572	JAMB NUT 1/4"-18 NPS
8	27086	BURNER END SUPPORT
10	P200	ORIFICE FITTING
		VFL28IN3 MILLIVOLT MODEL
9	P182	ORIFICE 1.55 mm - LP
9	P257	ORIFICE #40 - NAT
11	R10734	TUBE BURNER
12	R3623	PILOT ASSEMBLY - LP
12	R3624	PILOT ASSEMBLY - NAT
13	27147	TUBING ASSEMBLY - INLET
14	27093	TUBING ASSEMBLY - REGULATOR TO PILOT - NAT
15	R7063	PILOT REGULATOR - NAT
16	27094	TUBING ASSEMBLY - VALVE TO REGULATOR NAT
17	27092	TUBING ASSEMBLY - PILOT - LP
18	26161	VALVE BRACKET
19	R3625	VALVE - LPG
19	R3626	VALVE - NAT
22	26162	PIEZO BRACKET
23	R3436	REMOTE OFF/ON SWITCH
24	R9760	PIEZO IGNITOR
25	28039	PILOT BRACKET
NS	R5668	IGNITOR WIRE
NS	R10947	REMOTE/OFF/ON HARNESS

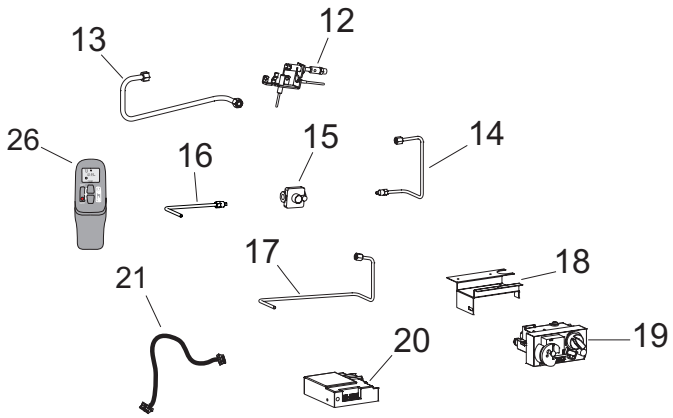
Index No.	Part No.	Description
		VFL28IN7 INTERMITTENT PILOT MODEL
9	P182	ORIFICE 1.55mm - LP
9	P300	ORIFICE #40 - NAT
11	R10734	TUBE BURNER
12	R5170	PILOT - LP
12	R5171	PILOT - NAT
13	27148	TUBING ASSEMBLY - INLET
14	27145	TUBING ASSEMBLY - REGULATOR TO PILOT - NAT
15	R7063	PILOT REGULATOR - NAT
16	27094	TUBING ASSEMBLY - VALVE TO REGULATOR - NAT
17	27095	TUBING ASSEMBLY - PILOT
18	27091	VALVE BRACKET
19	27472	VALVE - LPG
19	27471	VALVE - NAT
20	R10566	ELECTRONIC CONTROL THERMOSTAT
21	R10567	WIRE HARNESS - 8 PIN
25	28039	PILOT BRACKET
26	R10565	REMOTE CONTROL THERMOSTAT
NS	R10568	IGNITOR WIRE
NS	R10569	SWITCH AND WIRE ASSEMBLY
NS	R10570	THERMOCOUPLE WIRE ASSEMBLY
NS	R10572	THERMOCOUPLE CONNECTOR
NS	R10564	REMOTE CONTROL KIT (INCLUDES #20, 21, & 26)

EXPLODED VIEW





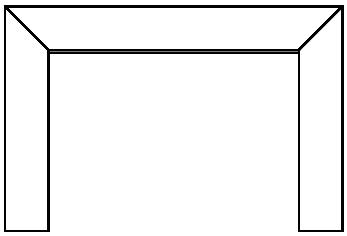
MILLIVOLT
VALVE ASSEMBLY



IPI VALVE ASSEMBLY

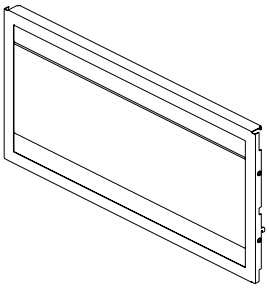
SURROUND FRONTS

This fireplace requires a surround, available from your Empire Comfort Systems dealer. The surround shown below allows the fireplace to be installed as an insert in an existing fireplace or in a mantel. For elevated installation in a wall, see the surrounds on the following page. If you need additional information beyond what your dealer can furnish, contact Empire Comfort Systems Inc., Nine Eighteen Freeburg Ave., Belleville, Illinois 62220.

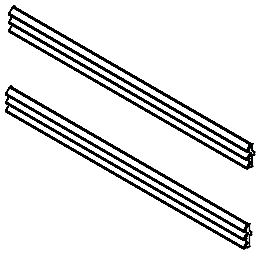


6x6 Surround

- Black



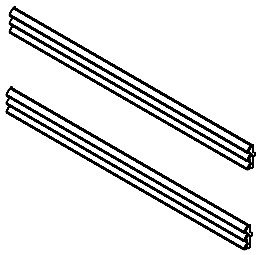
Glass Door Frame



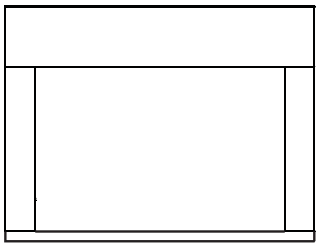
Louvers 45 Deg

- Black (Standard)

Insert Accessories



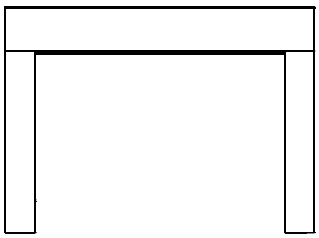
- Hammered Pewter
- Stainless



Shroud

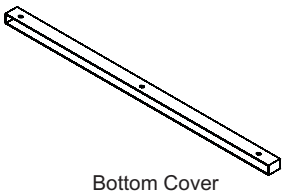
- Black

The shroud provides a transition from the fireplace/insert to your existing hearth opening up to 48 x 36 inches. Requires a surround.



Surround

- Black



Bottom Cover

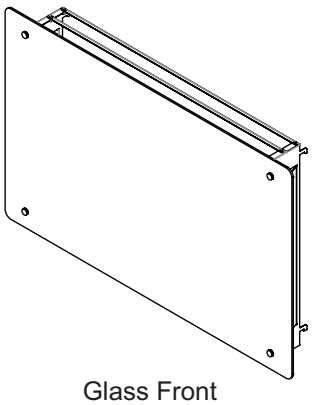
- Black

Used to finish off bottom of insert and surround panels when installed in a fireplace without a flush hearth extension. To be used with surround kits.

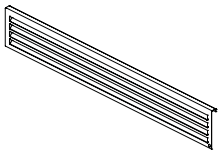
SURROUND FRONTS

The fireplace requires a surround, available from your Empire Comfort Systems dealer. The surrounds shown below allow the fireplace to be installed elevated in a wall. For installation as an insert in an existing fireplace or in a mantel, see the fronts on the previous page.

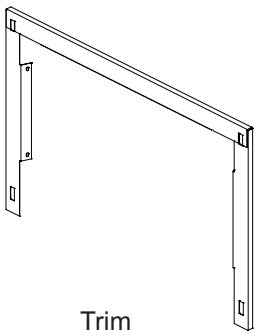
Glass Front
Glass panel with mounting brackets, shield and hardware.



Glass Front

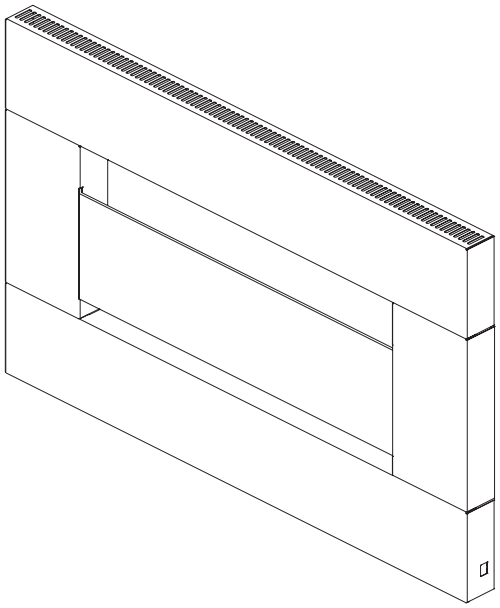


Bottom Shield



Trim

Metal Picture Frame
With glass panel (concealed louvers on top)



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If you have a general question about our products, please e-mail us at info@empirecomfort.com.
If you have a service or repair question, please contact your dealer.

www.empirecomfort.com